INTRODUCTION TO CATALOGING AND THE CLASSIFICATION OF BOOKS » » »

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LIBRARY CURRICULUM STUDIES

Prepared under the direction of
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Library Curriculum Studies

THESE six texts were prepared under the auspices of the A.L.A. Curriculum Study at the University of Chicago and of the Editorial Committee of the A.L.A., to meet the needs of library schools for basic books on the principal subjects of instruction. The Curriculum Study plan was inaugurated by the Board of Education for Librarianship of the A.L.A., and was made possible by grants from the Carnegie Corporation of New York. The books represent efforts to contribute to education for librarianship and to stimulate other studies of similar character.

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American Library Association

Introduction to Cataloging and the Classification of Books

By

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1930

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TO

CATALOGERS

IN MEMORY OF

K. L. S.

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Director's Introduction

In preparing textbooks for this series the following methods are utilized:

The Advisory Committee of the Curriculum Study, selected by the Board of Education for Librarianship of the American Library Association to represent all the types of institutions concerned with the preparation of the textbooks, determines matters of policy.

The Editorial Committee of the American Library Association, with the advice of the Advisory Committee, selects a small group of outstanding persons in the field to be treated by the textbook, from which group the author is selected by the Director of the Curriculum Study.

A subcommittee of advisers composed of experts in the field gives advice and assistance to the author.

The author and the staff make a detailed analysis of the duties and traits of workers in this field in order that a clear picture may be had of the problems and activities that are to be discussed in the text.

All the literature bearing upon the methods of performance of duties, principles underlying the methods, points of view, and objectives of the field is canvassed.

Visits are made to at least fifty libraries having a substantial reputation in the field in order to secure best methods which have not been recorded in print.

The author comes to the Study headquarters in Chicago and devotes an uninterrupted period of several months to preparing the first draft of the textbook with the assistance of the staff.

The textbook as prepared in tentative form is mimeographed and used in library school classes for the purpose of receiving criticisms and suggestions which will be of use in the later revision of the text.

It is also submitted to twenty-five or more persons who

qualify as experts in the field and are not connected with library schools.

The author in the light of these criticisms and suggestions revises the text for final publication. The text is then printed for general distribution by the American Library Association.

At least two hundred people engaged in library work contribute to the preparation of each text. Thus the series is to a quite unusual degree a cooperative enterprise of the library profession.

W. W. C.

Chicago
July, 1929

Preface

Purpose. This book is intended for students beginning a study of Library Science. It is written with the realization that the course in cataloging and classification is but one course in a full curriculum, and that, while such a course leads to specialization, it cannot be expected that all students will choose to become catalogers. An attempt has been made to tell what the catalog is, where it leads, and what service it can give, and therefore what it means to catalog and classify books. By covering principles, as well as certain detailed methods, the text aims to reach not only those who will become catalogers, but also those who may be executives or assistants in any part of the library staff. Thus the interpreters as well as the makers of the catalog have been kept constantly in mind.

Scope. This is an *explanatory* text with some detailed outlines which give the first description of present (1929) library practice. No attempt has been made to give the history of classification and cataloging, or to cover the cataloging of special collections, such as maps, documents, pictures, and other auxiliary groups, but the underlying principles herein expressed may guide one in dealing with such material. The discussion is not limited to problems in a single type of library, but reference is made to public, university, and special libraries as these types need emphasis. When small libraries require a different treatment from that described, this is usually stated.

The choice of matter to go into the book has been very carefully considered from the pedagogical point of view. Advanced courses must grow out of basic courses. Subjects have been introduced sometimes with only a suggestion as to their development, inviting further study. Some excerpts included in the book may seem unnecessarily long when taken from reference books which are easily accessible, but these have been included so that this text may be used for home

study. One or two chapters do not have decided teaching value, but it seemed best to include them for the use of the students when beginning their work in the field.

The interest of the student is more easily sustained if the emphasis of the course is placed on books and their potential readers, and if the principles of cataloging and classification precede the technique. Such a presentation will show that cataloging and classification are two of the fundamental branches of library science. By stressing principles the student learns, too, that he is preparing for a bibliographical, not a clerical, position.

Laboratory practice. The study of these branches involves problems requiring performance of a definite duty as well as the creation of a definite thing. The student must, therefore, spend a carefully proportioned part of his time in laboratory practice where he catalogs and classifies books. Such laboratory practice makes clear the objective of the course "to fit for useful employment." It should not be carried beyond the point of being a learning medium. In the laboratory the student has an opportunity to show his desire and aptitude to cooperate, to work with consideration for others, to subordinate himself to the accomplishment of his task, to do accurate and painstaking work, and to acquire that skill in execution which will make him a quick and discriminating assistant.

This book attempts to orient the student for his approach to this practice work. If this method of orientation is followed, some time will be spent in stressing books and their make-up, catalogs and their use, and subjects and their ramifications, before beginning the actual making of catalog cards. During this time the laboratory practice will consist in handling types of books so that the student may become familiar with them.

Code recommended. The *A.L.A. Catalog rules*[1] is the code recommended as a laboratory manual. While rules for catalog entries are rarely repeated in this text, the value and necessity of following definite directions are made apparent.

[1] Catalog rules, author and title entries, compiled by committees of the American Library Association and the (British) Library Association. American ed. A.L.A., 1908.

Rules for entry have been officially accepted and adopted by libraries as the result of long discussion and study. England and America through their joint code, the American edition of which is recommended above, have provided standard rules for cataloging which have been adopted not only by our national library, but also by foreign authorities as a base for codes compiled by them.

Now that our rules have been uniformly accepted this seems to be an opportune time to relax the rigor of the detailed method of studying rules alone and to substitute a broader and perhaps more interesting procedure.

Card form. Library of Congress cards are emphasized, and the unit card form is recommended in all but exceptional cases, since it is recognized as most economical and most satisfying.

Methods of presentation. This text only suggests methods of study. Anyone is free to use the chapters as best judgment dictates. It has been written with a conviction that more work can be covered, more interest can be aroused, more of value given, and better catalogers and more discerning executives produced, if the course in cataloging and classification is built around the whole book, and its subject as expressed in classification and in the subject catalog. The author therefore advocates the study of classification and cataloging in the same course. The two subjects can not, or should not, be entirely divorced in actual practice in a library, and even if so divided the cataloger should know the relation between the two processes, and the classifier should understand how books are cataloged. There is a decided gain both to the student and to the library school if one catalogs and classifies at the same time, as more work can be accomplished in the same amount of time.

These suggestions, representing the feeling of catalogers already in the field, have resulted in the shaping of this text so as to prepare students, in so far as possible, for practical work under existing conditions. Sufficient time should be devoted to each chapter to master the details included and to allow for the examination of illustrative material.

Plan. The plan may be outlined as follows: An introduction for the purpose of giving some conception of what it means to prepare books for use (Chapter I); this is followed by an analysis of the make-up of a book and the value its different parts may have for the reader (Chapter II); books are then discussed as groups to find some common basis for their classification and shelf arrangement (Chapter III), which study leads naturally to the need for definite schedules of classification (Chapters IV and V) and the records necessary to maintain a specific scheme of classification and furnish symbols for shelving books (Chapter VI). Having shelved the books by subject, the next step is to catalog them so they may be quickly found. This means a discussion of the catalog: its function, form, type and technique (Chapters VII–XII). With these needs settled we now turn to a study of duties as actually carried out in practice (Chapters XIII and XIV) followed by a consideration of the movements leading to the distribution of the Library of Congress printed cards and the use of these cards in practice (Chapters XV and XVI). The next consideration is how best to organize and administer a department which must care for the work as herein surveyed, together with a consideration of supplies and equipment (Chapters XVII and XVIII). Finally comes a discussion of how the instrument we have been constructing may be made to yield its greatest usefulness (Chapter XIX). The last chapter (Chapter XX) is introduced to illustrate the presentation of one subject during one class period.

From the above outline it is apparent that the book follows the progressive method of treatment. The method of teaching used by the instructor will, of course, determine the way in which the book can be made to yield the greatest service. Some chapters will be most effective if read before the instructor begins a discussion of the topic to be studied, while others will be more helpful if read to summarize a discussion. The chapters are correlated to make a whole, therefore no one chapter can be read independently of others by those unfamiliar with the subjects of cataloging and classification.

Thought questions. Following each chapter is a list of questions by which the student can test his own knowledge of what he has just read. These questions should provoke discussion and add interest to the subject.

References. References at the end of each chapter have been chosen for students. For this reason it has not always been possible to choose the best, or even the most interesting, articles and books. Such reading must come within the range of the student's knowledge of the subject. Controversial literature has generally been excluded. In some cases where it was necessary to abridge a chapter, the references have been made more complete, so that the instructor may have a greater number from which to choose in making assignments for further study.

Model cards. Model cards could not be included satisfactorily in the text, but a list of Library of Congress card numbers for printed cards illustrative of each A.L.A. rule is included in Appendix I at the end of the volume. Rule numbers followed by the Library of Congress card numbers are furnished so that model cards may be ordered in complete sets or as individual cards. The use to be made of these cards is explained in Chapter VII.

Acknowledgment for valuable information is due, and is here gratefully made, to the libraries so generously contributing to the data collected for this text, to my co-workers who helped in shaping the book, and to those who so generously furnished constructive criticism of the preliminary edition.

A word of appreciation is also extended to students in my classes at the University of Michigan during the years 1926–1929. Their interest in and criticism of this text while it was in the process of writing have made the book better than it could otherwise have been.

MARGARET MANN

Ann Arbor, Michigan
July, 1929

INTRODUCTION TO CATALOGING AND THE CLASSIFICATION OF BOOKS

Chapter I

Introduction

To those who have had their interest in library science quickened by a love of books, or to those who have a desire to know books better and make them known to others, there is no more satisfying work than the handling of books as they come into a library. Here one turns his attention not to gratifying his own hunger for literature, but to the far broader task of studying books and recording them so that they may reach the thousands of readers who are in search of literature to satisfy some need.

To pass from a private library to a large collection of books brought together for public use carries one across a very broad and full flowing stream. Quantities of books confront one and the attitude of mind must change from small to large questions, for librarians are not owners of a few books, but distributors of many books and of much information. One cannot choose what he shall read, but must dip into volume after volume, passing from one author to another and from one subject to another, making contacts with all minds of the world's past history, and entering into the society of mental superiors and mental inferiors. Modest men and women make up the galaxy of wisdom which confronts the cataloger as he daily works with books. Catalogers find through their work a realm as large as the universe, "the poets sing, the philosophers discourse, the historians unfold the wonderful march of life, and the searchers of nature reveal the secrets and mysteries of creation. . . . The only true equalizers in the world are books; the only treasure-house open to all comers is a library; the only wealth which will not decay is knowledge. . . . To live in this equality, to share in these

treasures, to possess this wealth, and to secure this jewel may be the happy lot of everyone."[1]

The study of books. It is the happy lot of the cataloger not only to dwell in this world of books, but to study and examine them so that the readers who frequent libraries may have the benefit of the wisdom, intelligence, and literary talent of those whose works are on the library shelves. This analysis demands a broad vision, a sympathetic outlook, and a determination to read perseveringly with faculties on the alert, as well as a certain amount of sustained effort and expenditure of brain-tissue. Those who catalog may truly be called the "servants of the servants of literature" for it is their task to examine, cull, arrange, and record the works of the writers of all generations. The cataloger must act as a medium between writer and reader, endeavoring to estimate justly the intention of the one and the need of the other. He must study books comparatively to detect differences in style and treatment in order to know what value they may have for various types of readers. He must realize that the books intrusted to his care must be examined and made ready for use in the same way that any other commodity is analyzed and studied, so that it may serve its maximum purpose. To bring about this fulfilment of purpose there must also go hand in hand with the study of books, an understanding of people. The cataloger must envisage the needs of the reader, endeavoring in every way to make it a simple process for him to find books. He should, like the librarian, adopt a neutral stand between the reader and his books, giving emphasis to what the author intended to describe rather than to his own views. He must realize that the methods and terms used to express subjects, as well as book technique, must be suited to the type of reader for whom the book was prepared. He must be aware that what will please the advanced student will be unintelligible to the average man, what will furnish information to the uninitiated will be useless to the specialist, what will interest and stimulate one reader will find little favor from another, what is written for the adult cannot be understood

[1] Scott, Temple. The friendship of books. Macmillan, 1911, p. 155.

by the child, and conversely, what is prepared for the child is too elementary for the adult. It is this understanding of groups of readers which must go into the successful study of books as they are being prepared for the use of a miscellaneous clientele. There are those who will demand special translations, revised editions, works with illustrations, compilations containing definite essays and stories, authors whose names they know but vaguely, subjects which are possible of various interpretations, histories of places difficult to locate, and a thousand things which only a thinking public can demand.

Books are valuable because they contribute to a certain subject or subjects; because they have been written by a certain person, institution, or group of persons; because the titles make an appeal; because they have been compiled or edited by persons of authority; because they have been recommended for a definite purpose; because some one chapter contains the only thing on the subject in print; or because a new edition of an old book has brought to light new information. Books in a library are tools collected for public use. They are usually chosen to serve the specific needs of a definite group of people. This group may be the inhabitants of a limited community, a village, town, or city; or it may be a student body, as in university and college libraries. Again, the library may aim at serving a group of specialists by building a collection limited to one subject, as Art, Engineering, or Medicine. Books for any one of the above types are selected to make a rounded whole by which the institutions may furnish information, recreation, and stimulation according to the needs of the group they are designed to serve.

Particular regard must be given to those libraries serving a very special class of readers so that the proper emphasis can be given to books according to their use. The medical library will find one use for a book, while an engineering library may wish to use the same book for quite a different purpose.

It is surprising to find how many interpretations can be given to the same treatise. Taking a rather homely example, the books on occupational diseases may illustrate the possible variations of use to which books may be put. To the medical

library the value of these books lies in the information they give about the cause and treatment of a disease; in the technical library they are used to study the effect a certain product may have on health; for the insurance library they contribute to the question of a certain risk; in the civic library they make a contribution to a phase of the labor question; to the financial library they give information about investing in a business where a certain risk exists; while to the public library will come readers seeking the subject from one or all the points of view mentioned above.

Purpose of cataloging. To catalog is not merely to copy title-pages. All books are listed as published, but the moment books are purchased for a definite purpose, as are the books in a library, the cataloger must not only record the names of the authors and titles but he must draw attention to their purpose, contents, and relation to other works, bringing together those books which treat the same subject, and arranging the whole collection so that books may be used comparatively. All the volumes treating of Chemistry will be brought together on the shelves, and all those on History, Education, Astronomy, Physics, Art, Music, Drama, Sociology, and Religion will be found in separate groups. The reader interested in seeing what books the library has in the field of education, for example, will not want to go all over the library collecting these books. The classifier must so assemble this information before the request comes that he can answer questions quickly and effectively. Within each large field, he will so well arrange the books that the searcher may be led from one topic to another. For example, the reader beginning his search with books on general education may expect to find this subject covered by a very few books, but as he proceeds, he is led on step by step into the ramifications of the subject. He will find books which not only show the extent of his general topic, but also those which give him the works covering the details of each branch of his theme. He finds books on teaching methods, school organization, curriculum making, school discipline, etc., all of which help to map out for him the possibilities of his field of work.

Problems of cataloging. Since every book which comes into a library must be examined and studied before it can be placed on the shelves with other books of like kind, the cataloger encounters many problems. Many a book is elusive and many a subject is baffling. For example, a title will appear to be perfectly new, the title-page may even bear a recent date, and yet upon examination the book will be found to be merely a new edition of a work already in the collection.

Again the cataloger soon learns that the title is no criterion for determining the subject of a book. This is true even when the words in the title do not seem ambiguous. Such a simple title as *Railroads* would seem to present no very serious consideration, but the cataloger knows that he must immediately put the questions: Does this book treat of the subject of railroads in general, or is only the economic side emphasized, or does it cover merely the construction of railroads? If the point of view is not recognized by the classifier the man who is studying railroad engineering may miss a book covering his field because it is incorrectly classified with the books on the economics of railroads.

When a book called *Simplified school accounting* comes over the cataloger's desk, he must decide whether it is best to put such a book with others on the subject of accounting, or to let it take its place with books on school organization and management. The volume *Bad debts; a drama in one act,* by Margaret Cassie Searle, for example, is to be placed with other dramas, but before this can be done the cataloger must know the nationality of the writer, since a library usually plans to arrange works of *belles lettres* together by the nationality of the author. Next is a translation of Jeffery Farnol's *The broad highway* into Polish (*Na szerokiej drodze*). Shall this stand with books in the Polish language, or with the English edition of the same work? It is this grouping of books which makes it possible for much of the work with readers, and for readers, to be carried on effectively, and it is the classifier who is responsible for their correct allocation.

Unless books are correctly classified they are not ready

for use. A new branch library, for example, cannot function unless there are books on its shelves marked and ready to circulate, nor can the reference librarian answer so quickly the demands which come to his desk, if he cannot go directly to the shelves and find in one place books of like kind. He must be able to pick out one book after another and use these comparatively. The mechanical make-up of a book is such that even though it treat of two or more subjects the book itself can stand only in one subject group on the shelves. A book on travel in France and Switzerland can be shelved with other books treating of France, but it cannot at the same time be shelved with those on Switzerland. A key to the shelves must be provided which will list this book not only under France but also under Switzerland and under the name of its author as well. This key to the books is the catalog. It is made up of entries so arranged on cards that authors, titles, and subjects, and the books to which they refer can be quickly and easily located. The catalog functions whether the books are in or out of the library and it is to this record that one must go to find not only what authors and subjects are represented by the books on the shelves, but also all their bibliographic details, such as publisher, date of publication, illustrations and other descriptive items.

The department of the library where the catalog is compiled may be likened to a scientific laboratory in which the scientist analyzes his minerals. As the assayer separates the precious metal from its alloys, preserving the choice bits which are buried in each piece of ore, so the cataloger analyzes each book, not alone to discover its major subject, but to find hidden bits of information which may be buried between its covers. Not only subjects but authors as well are ferreted out. Authors furnish many entanglements which the cataloger must unravel before he can give the reader a correct reference to the works of the hundreds of writers who crowd the library shelves. Often these are loath to divulge their names, others cover their identity by an assumed name, while some use a name so brief that it is difficult to prove their identity.

It would seem to be a very simple matter to make an alphabetical list of authors and their books; in most cases the name of the author is on the title-page and the title is clearly set forth. But when one begins to collect proper names, there are many complications. For one thing, every name must be correctly designated. If, for example, ten different men by the name of John Smith have written books, each must be linked with the correct book. John Smith, who was born in 1880, has written the book on mathematics, and John Smith, the scientist, has written the one on astronomy, and so on. Each John Smith must be given a distinguishing mark to place him correctly for the reader. The same difficulty is found with persons who have changed their names. On one title-page we find George A. Birmingham and we enter the book under Birmingham; in a few weeks we find another book written by the same author, but the title-page bears the name J. O. Hannay. The two books must be grouped together, because we find on investigation that Birmingham is only an assumed name sometimes used by J. O. Hannay.

It is a stimulating study to trace the elusive author who apparently feels privileged to use any name which fancy dictates. Occasionally an author assumes a double personality, as did William Sharp. Here was a man who wrote a certain type of book under his real name, and quite a different type under the pseudonym of Fiona Macleod. The identity of the assumed name never became known during the lifetime of the author, so well was it guarded by his publishers. Some writers have been known to use as many as twenty or more pseudonyms, but if the cataloger follows all of these, the works of one writer will be scattered in twenty or more places in the catalog. Rather than do this the cataloger must choose one name, preferably the real one, and make a reference from all the others. These references make it possible for the reader who may have remembered one of the pseudonyms, or who may have found one from another catalog or bibliography, to be directed to the name chosen. This system of "cross references" plays an important part in any catalog and will be treated in more detail as this text advances.

Authors who collaborate in the writing of books must be treated in a certain way, authors of anonymous books must be identified, if possible; publications of societies must be listed under the true name of the society; government publications must be registered so as to show from what department, bureau, or office they emanate. Even many of the small public libraries now have the problem of classifying and cataloging books in little known languages for groups of foreign readers who have settled in their community. Proper names of these foreign writers introduce problems of spelling, of correct entry and of cross-references, and some, such as Russian, Hebrew, and Greek, require transliteration.

Perhaps what has been said about preparing books in a library has led readers of this chapter to ask the question: How are libraries able to cull this mass of printed information and give it back to the present generation so they can use it, transform it, and add to it?

Scope of cataloging. The task is indeed a colossal one if the collection of books is large. Nor can its difficulties be measured by the size of the accumulation; even the small collection may be made up of very difficult books. While in general the task becomes more complex as the collection increases, it is not always the number of pieces which makes the task appalling; it is rather the ever present fact that inside the covers of each book there is a condensation of *thought* which must be digested and disclosed.

The extent of the field often seems appalling, and perhaps no one has so tersely summed it up as has Agnes Repplier, who says:

> "With every century that rolls over the world there is an incalculable increase of knowledge. It ranges backward and forward, from the latest deciphering of an Assyrian tablet to the latest settling of a Balkan boundary line; from a disconcerting fossil dug out of its prehistoric mud to a new explosive warranted to destroy a continent. Obviously an educated man, even a very highly educated man, must be content in the main with a modest and wise ignorance. Intelligence, energy, oppor-

> tunity—these things are doled out to him in niggardly fashion, and with his beggar's equipment he confronts the vastness of time and space, the years the world has run, the forces which have sped her on her way and the hoarded thinking of humanity."[1]

Librarians are able to extract some of the "hoarded thinking of humanity" and make it known to readers because, like many other specialists, they have made a study of their particular problem. They have applied themselves to evolving the ways and means by which printed information can best be made available. The methods are by no means perfect, nor are all the demands met which come to the libraries, but there is a technique and a science back of all library work without which it would be impossible to survey the field of knowledge as contained in books.

Libraries reach their readers through many channels: by personal contact, through clubs, through story hours, through extension service, through schools and through lectures. Not the least of the means for furthering the use of books is the work which is done behind the scenes in a library where technical methods are being evolved and applied to the classifying and cataloging of books. This service is fundamental since other duties are dependent on its performance; unless books are carefully and scientifically prepared for the shelves and for circulation, the functions of a library cannot be fulfilled. It is in the consideration of these methods that we come to the technique of our subject.

Technique. An effort has been made in the foregoing paragraphs to sketch the cataloger's activities in their relation to books and readers without going into the ways and means of making records, but it is in the making of the records pertinent to cataloging and classification that one must apply the technique peculiar to these two branches of library work. This technique may be grouped as follows:

1. Book technique
2. Classification technique

[1] Repplier, Agnes. Education. Atlantic Monthly 129:486–93. April, 1922.

3. Cataloging technique including the preparation of cards for the catalog
4. Administration technique

Book technique. By book technique is meant the physical make-up of a volume as it comes from the press. Without a familiarity with the different parts of a printed book it is impossible satisfactorily to describe a book. Therefore, the student of cataloging must know not only the content worth of a book, but must know also its bibliographical make-up, which denotes the value the book may have aside from its contents.

Classification technique. Librarians, following in the footsteps of philosophers, have worked over the schemes of knowledge as outlined by such thinkers as Aristotle and Bacon and turned them into bibliographical schemes. This application of the classification of knowledge to the classification of books has resulted in many printed schemes for book classification which were applied to libraries at a very early date. Many of them have become obsolete, others have survived, and some have furnished a base for modern schemes. It is by means of such a systematic plan, or scheme, that books are classified, and it is in the application of such a scheme to the library book collection that the technique of book classification has been developed.

The study of classification is most fascinating. It gives one a broad conception of subjects, a new comprehension of books, a knowledge of the extent of the field covered by books, and an appreciation of logic which cannot fail to influence one in any undertaking which requires the application of system and order. From this study comes a natural inclination to clarify and analyze each new problem; hence the person who applies himself to this branch of library work will find that he is not only equipped to classify books, but that he has gained a habit of thinking which can be used to great advantage in any line of work.

Cataloging technique. All catalog entries must be prepared according to the codes of rules formulated by librarians after years of experimentation. In these codes is found

much of the technique which must be studied if a reasonably consistent catalog is to be compiled. As the architect must make his drawings with an accuracy and nicety which will insure perfect understanding of his plan, so the cataloger must prepare catalog cards so as to give a true transcription of the bibliographical details of a book. The preparation of the catalog and other records pertinent to its maintenance forms a very important part of the cataloger's work. Fortunately much of the actual duplication of the copy can now be accomplished by mechanical means.

Administration technique. In those libraries which accumulate thousands of volumes, the cataloger is confronted with definite administrative problems. There are questions of sorting, storing, and mechanical handling, and those questions of personnel which must be considered when a staff of considerable size is working with a shifting and ever changing commodity. The adjustment of the mental and mechanical forces within such an organization requires a knowledge of a particular kind of technique.

Value of technique. Every performance, or duty, carries with it a technique peculiar to the special type of work to be accomplished. There must be a certain routine and skill of execution which may in itself be devoid of interest but which, when fully understood and justly evaluated, will be accepted as an essential element in achieving the ultimate goal. Catalogers are surrounded with details and this phase of the task must be a challenge to the worker to make the technique so perfect and so sane that the ultimate aims of the work will be more forcibly brought into relief.

The student who begins a study of classification and cataloging will want to apply himself to mastering the technique that he may as soon as possible arrive at the point where familiarity with the minutiae will allow him to enjoy books unhampered by his ignorance of the groundwork upon which he must build.

While he must become an adept in the handling of details, he must never lose sight of the broader side of the work. Technical methods must furnish the means for accomplishing

effective results. They must not, however, be overemphasized and obscure the vision and blind one to the more important problems.

The art of knowing what to leave undone is quite as important as the art of knowing what to do, and over and above all rules there must be exercised a large share of common sense and judgment which will lead one into a consideration of values and keep one from lapsing into fear of error.

Compensations. It may be interesting to know that every bit of information which has ever been accumulated will sometime come into use when one begins to classify and catalog books. With each new day comes some added bit of information gathered as the books are passing by. All this accumulation of facts and impressions goes back into the daily work and lightens the burden as the experience broadens.

Mr. Fortescue, that scholar who gave assistance to readers for so many years at the British Museum in London, so aptly said:

> "Is it not rather the peculiar felicity of the librarian's calling that in whatsoever reading or study he may follow for his own sake, he is also adding steadily to his ability to carry out his daily duties? . . . Their reading may be wide and desultory, fiction, science, history, any printed matter which comes first to hand; or they may be among those most enviable of readers, who have taken up a hobby and cultivated a taste for the Iliad, the Kalevala, the river Amazon, the French Revolution, the manufacture of paper kites—it matters little what—and have learnt one great secret of literature, the knowledge that, to him who has made a subject his own, no book which gives him one new fact, or suggests one new theory, can be dull or barren. But to men and women engaged in other business, reading is a pastime only. It is outside the daily work; it cannot be built into the duties of the camp, the court, the counting-house. Not so with the librarian. No reading is alien to his occupation or remote from his daily routine. No scrap of added knowledge, no page of unpractical lore is waste material to him. They are the reeds by the river today, but to-

morrow they may write for him his most lasting memorial."[1]

References

Bay, J. C. Inspiration through cataloging. A.L.A. Bulletin 10:237–41. Papers and Proceedings, July, 1916.
Compensations in the work and the cataloger's attitude towards it. A sane and interesting article.

Billings, J. S. The card catalog of a great public library. Library Journal 26:377–83. July, 1901.
Demands upon the catalog, how it is used and made, by a librarian who appreciated good bibliographical work.

Bishop, W. W. Cataloging as an asset. In his Backs of books. Williams and Wilkins, 1926, p. 125–48.
An excellent presentation of the worth of a catalog, with practical examples of its help to the reference librarian. This has also been printed in pamphlet form.

Blodgett, E. M. Spirit of cataloging. Library Journal 44:176–78. March, 1919.
Emphasizes the cataloger's contact with the outside world and shows the rewards which come from working with books.

Brown, L. F. Adventures among catalogs. Public Libraries 26:371–74. July, 1921.
A real appreciation of catalogs and their makers. The author was professor at Vassar College at the time the article was written.

Butler, Pierce. Bibliography and scholarship. Bibliographical Society of America. Papers, 16:53–63. 1923.
The experiences of a student who points out the disadvantages resulting from the lack of a knowledge of cataloging and bibliography.

Coe, F. R. Making the dry side of cataloging interesting. Public Libraries 26:367–70. July, 1921.
The cataloger's opportunities and the catalog department in its relations with the library, told by one who believes in her work.

Keogh, Andrew. Thoughts on cataloging and catalogers. A.L.A. Bulletin 2:360–71. Papers and Proceedings, September, 1908.
What reference workers want and expect of catalogers and the advantages gained through cooperation. By the librarian (1929) of Yale University Library.

Saxe, M. S. Books and classification. Public Libraries 16:323–27. October, 1911.
What it means to classify and some of the problems, sometimes amusing, which the classifier has to meet.

[1] Fortescue, G. K. The British Museum and the completion of the general catalog of printed books. Library Association Record 3:447–48. September, 1901.

Chapter II

How to Read a Book Technically

I. Reading the Book Technically
II. Cover Title
III. Binder's Title
IV. Half Title
V. Series Title
VI. The Title-page
    1. Title-page title
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XVI. Collation
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    4. Size
XVII. Summary
XVIII. Outline for Making a Catalog Card

It was suggested in the preceding chapter that those who work with books constantly must acquire a certain book sense, or technique. Books have a physical as well as a mental value. Both of these elements must be described in cataloging.

In this chapter we shall take up the study of the mechanical and bibliographical make-up of a book and try (1) to de-

velop the student's powers of observation so that he may have a base for his future work, and (2) to point out details about a volume and analyze them in order to determine their value to the cataloger and the reader.

No attempt will be made to cover rare books.

Methods of recording the details brought out here will not be considered until later.

I. Reading the Book Technically

If the average person were asked to describe the mechanical make-up of a book, it is doubtful if he could name, with any degree of accuracy, the various sections which go into a well proportioned volume.

Usually only the title-page and the page given to the table of contents receive any consideration before one plunges into the text. That fascinating foreword of the author—the preface—is too often passed over as something autobiographical and dull, and the introduction, which frequently elucidates the whole text, is disregarded in one's haste to scrutinize the first chapter.

It is very important that those whose duty it is to describe books, and to facilitate their use, should be familiar with every detail of the author's and the publisher's art. One must learn what to observe about a volume so that he may be able to put his finger on the essentials without waste of time and effort. He must be able to discern the essence of the book, which the author may have revealed in his preface or his introduction, and come to realize that the "summary chapter" often discloses sufficient information to make the reading of the book as a whole unnecessary.

Reading a book technically is reading all that is auxiliary to the real text. The cataloger must be able to describe the books in such a way that a reader can visualize the volume, its size, date of publication, publisher, and all other details which go into its composition. It is this technical knowledge which makes it possible for the cataloger to read rapidly, but adequately, the quantity of books which daily come to his desk.

This habit may impress one as superficial and dangerous to cultivate, but for the cataloger it is an economic measure which can be employed to great advantage. It is not recommended for the reader who must digest and understand every small point treated by the author; nor is it advised for the reader who has plenty of time to linger over a volume and enjoy every whim of its writer; but for the person whose work it is to make books known to others it has come to be a recognized practice. To a successful cataloger it is usually more important to make fifty books known to somebody else than to spend time making a critical study of *one* book.

The order of this study of books will follow the order of the pages after the cover title and binder's title have been described. Emphasis will be given to points the cataloger will need to use later.

II. Cover Title

The cover title is that printed on the original cover of a book or lettered on the publisher's binding, as distinguished from the title lettered on the back of a particular copy of the book by the binder. (A.L.A.)[1]

In general this title is unimportant for purposes of cataloging, and can be disregarded. If, however, it is a striking title and different from that printed on the title-page, it should be noted, because some reader may remember it, or some printed catalog may have listed it. In either case the reader must know that the library has the book under this title. If there is no title-page in the book, the cover title is accepted as the official title.

III. Binder's Title

The binder's title is a title lettered on the back of a book by the binder, as distinguished from the title on the publisher's original binding or cover. (A.L.A.)

If the binder's title or the cover title varies from that on the title-page, it is often difficult for the reader and assistant to recognize a book as it stands on the shelves. The cataloger

[1] (A.L.A.) will be used to mean the *A.L.A. Catalog rules.*

always lists the book for the reader under the title as given on the title-page, because it is the official title of the book and subject to less change than other titles. The binder's title is only a whim of the binder and can be corrected when the volume is rebound. It is necessary, however, to take account of the binder's title, as well as the cover title if either differs from that on the title-page. The binder's title may be a common title for a series of volumes, or it may be a series title.

IV. Half Title

The half title is a brief title without author's name or imprint, printed on a leaf preceding the main title-page; called also a bastard title [and fore-title]. (A.L.A.)

This may have little or no use for the reader or the cataloger unless it is the only title in the book or gives indication of the series.

V. Series Title

A series is defined by Murray in the *New English dictionary* as "[1] a set of literary compositions having certain features in common, published successively or intended to be read in sequence [as Austin Dobson's *Eighteenth century vignettes,* 1st–3d ser., or Marion Crawford's Saracinesca stories]; [2] a succession of volumes or fascicules (of a periodical, the publications of a society, etc.) forming a set by itself (distinguished as first, second, etc., series) [as Johns Hopkins University studies in historical and political science]. [3] Also in recent use, a succession of books issued by one publisher in a common form and having some similarity of subject or purpose; usually with a general title, as 'the Clarendon Press Series' or the 'Men of Letters Series.'"

The title of the series to which a book belongs may appear on the half title-page, the title-page, or even on a page following or preceding the title-page.

Some unimportant publishers' series have little value for the reader, but publications issued in successive parts or intended to be read in sequence are very important. Series are usually known by name, or title. Frequently the editor who

plans the series and brings its various parts into a whole should be given credit for his work. (A.L.A., 128; Fellows, 70–72.)

VI. Title-page

The title-page is the page at the front of the book which contains the full title and usually gives author's name, edition (if other than the first), publisher, place of publication, and date of publication.

The title-page is an important key to the book given to us by the publisher. We are not consulted as to its make-up or its contents; we must, however, interpret it for the reader who has perhaps never seen it. This must be done in such a way as to give as clear a description of the book as possible. The interpretation requires more than the ability to copy what one finds printed on the title-page. It often means (1) a transcription and selection of the matter to make the title clear, (2) a change in the form of the author's name to bring him in his correct relation with his works in the catalog, (3) the correct interpretation of the edition, the publisher, the place where the book was published, and the date when published.

1. Title-page title. In the broad sense, this title is the distinguishing name of any written production as given on the title-page, including the name of the author, editor, translator, the edition, etc., but excluding [other items descriptive of the book]. In the narrow sense, the title does *not* include the name of the author, editor, etc. (A.L.A.)

The broad definition is the interpretation given the term by librarians, and is the one to be followed in this text.

a. Official title. The title on the title-page is the essential caption of the book, and is the one which should be accepted, in whole or in part, as the official title by the cataloger; it is considered the *true* name of a particular work and is used on all official and public records in the library, and in trade catalogs, such as publishers' lists, auction catalogs, etc.

b. Modification and explanation of the title. The art of the cataloger comes into play when selecting words to be

retained in a title which is too long to be used in a catalog. Titles differ in length from one or two words to hundreds of words, and the cataloger must choose what is important and reject the redundant.

Those things are important in the title which in any way explain (1) the subject; (2) the point of view of the author; (3) the limits of time or period covered; and (4) the type of reader for which the book has been written. The non-essential things are the mottoes or quotations often printed as a part of the title, and phrases which shed no light on the subject under discussion or the author's point of view, and serve no other useful purpose.

Sub-title. The sub-title is a secondary or additional title of a book. It has great importance to the reader because it usually explains the purpose of the book or shows its limits. The following titles will illustrate: *Thirty years of labor, 1859–1889;* the dates in this case fix the exact period covered. *School management and methods of instruction; with special reference to elementary schools;* without the last phrase the title would be misleading, but as soon as we know it is limited to elementary schools we can distinguish it from other books on school management.

Alternative title. A sub-title introduced by "or," or its equivalent; e.g., *Fair maid of Perth; or, St. Valentine's day.*

Ambiguous titles. When the title is so vague as to be misunderstood, it may be amplified for the reader. Such titles as *Resurrection of our Lord* [*a drama*]; *Fires* [*and other tales in verse*] illustrate this type. Brackets may be used or the information may be given in a note. Titles made up of personal names should be explained, or they will be confused with biography, as, *General John Regan* [*a novel*]; *Abraham Lincoln* [*a play*]. A foreign title with an English text must be explained, as, *Le chevalier de Maison-Rouge* [*in English*]; or, an English title with a foreign text, as, *Barnaby Rudge* [*in German*].

Changed titles. A changed title is a title in a later edition, or reprint of a book, which differs from the title given when the book was originally printed.

It is an occasional practice of the publishers to change the title of a book to advance its sale, to elucidate its contents, or to make it better understood by an American or English public. One must be on the alert to discover such vagaries, which are usually noted in publishers' circulars and book reviews. This often happens in fiction when a new reprint is issued, e.g., the story by John Buchan entitled *Great diamond pipe* which has also been published under the title *Prester John.* Some readers will ask for the book under one title while some will remember the other, therefore the cataloger must list both and show the reader that the two titles refer to one and the same text.

Changed titles often appear in revised and abridged editions, in which case the book is usually considered as a new work. It must, however, be linked up with the original and following editions, for the sake of showing the reader the continuity of the work through its various changes.

2. Author of the book.[1] In a broad sense the author is the maker of the book or the person or body immediately responsible for its existence. Thus a person who collects and puts together the writings of several authors (compiler or editor) may be said to be the author of a collection even though he has not actually written the text. Corporate bodies, that is, bodies which are incorporated for the purpose of transacting business under a specific name, may be considered the authors of publications issued in their name, or by their authority. (A.L.A. with modifications.)

The title-page frequently helps in identifying an author. The desire of the author to place himself with his readers and so prove his ability to treat his text as a specialist gives the cataloger a cue. For example, such phrases as *Ph. D. (Harvard), Professor of physics of Yale, President of the Bank of America, Member of the National Geographic Society* furnish valuable keys by which the author can be identified. With these hints one can go to college catalogs, directories, and membership lists of societies and obtain full information needed as to the author's real name and identity.

[1] This is treated in greater fullness in Chap. VII.

Again, titles of other books written by the same author are often listed after his name on the title-page. These books may already be in the library catalog and the form of the author's name can be at once identified and accepted.

French authors often omit the initials of the Christian names on the title-page and use merely letters standing for titles, as M. for *Monsieur,* P. for *Père,* R. P. for *Révérend père,* and similar titles. Unless one is familiar with this practice, the letters may incorrectly be accepted as initials of the author.

3. Edition. The edition is usually designated on the title-page, but not always. Sometimes the information is to be found in the preface or introduction, on the verso of the title-page, or cover title. Wherever it occurs, it is an important characteristic of the book.

The definition of edition as given in the *A.L.A. Catalog rules* is: "The whole number of copies, printed from the same set of types and issued at the same time."

> "Edition is not used in connection with repeated printings unless there are changes in the text, a revision, (or) new matter added. . . . If it is a new printing only, without changes, the term should be *issue, impression* or *printing,* or simply a statement of the total number of copies printed to date."[1]

Thus in the true sense the edition indicated is not a question of reprinting, pure and simple, but of a reprinting carrying a certain number of modifications, suppressions, or additions. The significant and important thing for the reader to know is whether there has been a change in the text of the book, and if so, what the change is. For example, a particular edition may be demanded because it is the only edition which contains notes; again, the third edition may be wanted because it has been revised by an authoritative writer.

C. A. Cutter says:

> "The specification of edition is necessary: (1) for the student, who often wants a particular edition and cares

[1] Holden, J. A. The bookman's glossary. Bowker, 1925, p. 44.

> no more for another than he would for an entirely different work; (2) in the library service, to prevent the rejection of works which are not really duplicates. And the number of the edition is a fact in the literary history of the author worth preserving under his name; under the subject it is some guarantee for the repute, if not for the value, of the work. Nevertheless it is not worth while . . . to note 10th thous. or the like, which usually is simply an advertisement and does not imply any change in the work."[1]

A reproduction of an earlier edition of a book without alterations, except in outward form, made after several editions have already been printed from the same plates, is called a *reprint*. A new title-page may be used with or without the addition or substitution of the date of the reprint. Reproductions in facsimile, whether printed from type or otherwise, are called *facsimile reprints*. Photoprints fall into this class. "An *article* is said to be *reprinted* when it has a pagination of its own, beginning 1, 2, 3—and so on; *'extracted'* when the pages retain the numbering of the volume from which they have been taken, beginning, say, 237—and so on."[2]

Changes in content and form. The original book as issued may be changed in content or in form, and either of these alterations may designate another or changed edition. The changes in the content, or text, consist usually of revisions or enlargements, abridgments, expurgations, adaptations, or new supplementary material in addition to the text.

a. Revised and enlarged editions. Editions in which the text has been changed by revision, modification, additions, or corrections which remedy the faults in the preceding edition are called revised or enlarged editions.

These changed texts are designated as 2d edition, 3d edition, 6. auflage, nouvelle édition, according to the revision made.

b. Abridged editions. Epitomes. Editions which repro-

[1] Cutter, C. A. Rules for a dictionary catalogue. 4th ed. Govt. Print. Off., 1904, p. 99.

[2] Cambridge (Eng.) University. Library. Rules for the catalogues. Cambridge University Press, 1927, p. 31 (footnote).

duce only fragments of a complete work, or which briefly summarize the original text of the work, are called abridged editions.

Such editions must be distinguished from the large unabridged edition of the same work, so that the reader will get the edition he wants.

c. Expurgated editions. An expurgated edition is one from which objectionable parts in the original text have been deleted. These, like abridged editions, must be distinguished from other editions.

d. Adaptations. Dramatizations. An edition rewritten in such a way as to adapt or adjust the text to a type of reader different from the one for whom the author originally wrote. Lamb's *Tales from Shakespeare* illustrates such an edition; also *Lady of the lake* dramatized by Margaret Dakin and Miriam Thomas. (Fellows, 162.)[1]

Many adaptations, also called "Retold stories," are written for children. As juvenile books are usually shelved in a room apart from the adult collection, the original edition is separated from the adaptation. *Adventures of Odysseus; retold* is an illustration of this.

e. New material supplementary to the text. An edition having no change in text, but having a different make-up because of additional material, which may be in the form of additional chapters, notes, appendix, or introduction, should be considered as a different edition.

In books of this kind, the value and importance of the material determines its treatment. If the material is of value to the reader, the book must be considered as different in order to distinguish it from the same book without this supplementary matter. A volume of fiction, for example, which has been printed with a good biographical preface is not the same book as another copy without this preface. In this case the book is considered as another edition so the reader can call for the book which will give him this special information about the author.

f. Specially illustrated edition. If an edition is unusual

[1] Fellows, J. D. Cataloging rules. Wilson, 1922.

or important for its illustrations, it may be distinguished from an un-illustrated edition of the same book.

g. Author's edition. Publishers often issue the collected or complete works of an author uniformly bound and having a collective title, as *The writings in prose and verse of Rudyard Kipling.* These are commonly known as *Author's editions.* Such combinations of titles, each of which the library may have in other editions, introduce problems. Students will want to examine sets of books similar to the Kipling.

h. Other editions. Some libraries may also want to distinguish books having the same contents but appearing in different forms, as large paper editions, popular editions, folio editions, and editions of one or more volumes.

i. Copies. If two books are exactly alike as far as the printing of the text is concerned and the change in other parts of the book is of little or no value, no distinction is necessary. In that case the books are merely considered as two *copies.* Of course this does not apply to *first* editions; they frequently have value quite different from other editions.

4. Imprint. The place, publisher's name, and date of publication, ordinarily printed at the foot of the title-page, are called the imprint. (A.L.A.) The copyright date often found on the verso or reverse side of the title-page is also a part of the imprint.

a. Place of publication designates the location of the publishing house from which the book emanated. It does not always signify, however, whether the book is an American or foreign publication, for in this day of branch publishing houses that fact cannot always be taken for granted. Sometimes an American house has a London office and both New York and London appear on the title-page.

The place has weight for certain classes of readers but for the general public library it is rather unimportant. If the reader wishes to read a book treating of the birds of America, he does not want a book published in London or Berlin. He will select the book published in America. There are cases, however, where a scientific book on an American topic has been published in Germany or France

for economic reasons but which represents the American point of view.

b. Publisher. The publisher is the person or firm responsible for the production, circulation, and first sale of a book.

It is sometimes just as important to select a book issued by a good publisher as it is to select one written by an author of authority. The name of the publisher with a reputation for printing only high-class, authoritative works adds weight to the book and offers another guide to the reader in making his selection when he is confronted with many titles treating of the same subject. For example, a technical book published by McGraw-Hill carries more weight than another book on the same subject published by a publisher who does not specialize in the field of technology. If readers wish to purchase books it is convenient for them to find the name of the publisher on the catalog card.

c. Date of publication. The date printed at the bottom of the title-page may generally be accepted as the date when the book in hand was printed. It does not indicate the date when the book was *first* printed, if more than one edition has been issued. The date changes with reprinting, as was explained above under *Edition.* The title-page date should always be compared with the copyright date.

The date is important in all books except fiction, and even in this class it is a convenience to know if the edition is modern, or to show the author's "latest" novel. Being one of the most important items about a book, it must be given to the reader for all non-fiction books even if it is not on the title-page. Often it is to be found at the end of the preface, the dedication, or the introduction, but if it cannot be cited anywhere in the book itself, reference aids must be consulted in an endeavor to locate it. If all means of finding it fail, the text must be examined to see if dates have been used by the author in treating his subject. Take for example a book on modern history; if the text is brought down to 1914, the book must have been issued after that date. The cataloger can give the reader this information by using [1915?] as a probable date of publication. The brackets show

that the date is supplied, and the interrogation mark shows that the book was published *about* this period.

One will observe that in a work made up of several volumes, the dates of publication may differ in the different volumes. Occasionally a book marked v. 5, for example, will have an earlier date than v. 1 of the same set.

d. Copyright date. The copyright is a grant to an author by which the government assures protection against the use of his text by another. It gives the author, for a certain term of years, private and personal right to manufacture, print, and vend his own production. The copyright notice, usually printed on the verso of the title-page, is the date when the grant was given to the author. The first date signifies the date of the first edition of a copyrighted book and corresponds with the imprint date of the original edition. If several copyright dates are given, the dates signify a change in the text, or a renewal of the copyright.

When the book has gone through more than one edition the copyright date is valuable in showing that the book under discussion is not the first issue, but that other and earlier editions have appeared. To show the time which has elapsed between the date on the title-page and the date of the last issue, the latest copyright date may be cited along with the title-page date.

VII. Running Title

The title repeated at the top of each page of the book or of a section is called the Running title. (A.L.A.)

If the title-page is wanting, this running-title is very useful and can be used by the cataloger in lieu of the title on the title-page; it has no real value to call to the attention of the reader unless it is striking and will be remembered and called for.

VIII. Dedication

The dedication is an expression of homage on the part of the author to another person; it is usually brief, and is placed at the front of the book just before the preface.

Unless this dedication has some real literary value apart from the book, or is addressed to a person of distinction, it need not be called to the attention of the reader. Should the dedication be a poem as "To the Three Vikings" in Boyesen's *Modern vikings,* it should be made available, since some reader may want to locate it.

The biographical value of a dedication is very real if one is collecting all the information about a distinguished person; the fact that an author has dedicated his work to such a person may reveal important information to his biographer.

IX. Preface

The preface is a discourse, or note, which precedes the text; it contains the explanations which the author judges necessary to give to his readers. It may be written to present the author's plan, to set forth the objects of the book, to tell why it was written, to explain how the subject was developed, or to make acknowledgment for assistance received.

This foreword may be most *useful to the cataloger* in giving a brief survey of the text, and in providing catch-phrases which may reveal the scope, purpose, and value of the text. Such phrases are, "Can be used by beginners"; "Requires a knowledge of mathematics"; "Considers the subject in its application to the progressive development of industry"; "The purpose of this book is to bring together the fundamentals of the techniques of teaching and to indicate their use in the teaching of industrial subjects." All these phrases help to place the book by giving a key to the subject, or by showing the point of view from which it has been treated.

Again, one may find from the preface that the material is not new, that the chapters have already been given as lectures before some association or body, and have been issued in the "Proceedings" of that body. If the library has the "Proceedings" referred to, two copies of this information are available in the library, a valuable point for the cataloger to know.

The author in his preface frequently compares his book with others covering the same subject. This bit of information tells the cataloger with what group he classes his own

book and gives an excellent hint to aid in shelving this book with others of like kind.

The preface is frequently very important in establishing the real author of a book when the name has been omitted from the title-page.

Certain prefaces have been real literary events. That which Renan wrote for his *Life of Christ* may be cited, and also those in which Alexander Dumas discusses his dramatic works. Bernard Shaw has made the prefaces to his *Plays* of such interest that one cannot afford to pass them over. The cataloger should acquaint the reader with such forewords, since they have the same value as an independent book. In some books the preface is written by a writer different from the author of the book and may take on an independent value because the author is an authority on the subject discussed in the book; his views are always sought by certain readers even though they may be expressed in the preface of another writer's work. In this case the cataloger will often want to make known the author of the preface as well as the author of the book. The general preface will have little value to the reader and need not be noted. As we have already stated, its use to the *cataloger* can be very real.

X. Table of Contents

The table of contents is a list of the chapter headings of the book in the order in which they are treated. There may or may not be a detailed explanation of the topics treated in each chapter. (A.L.A.)

The table of contents allows the cataloger to see at a glance the whole field covered by the book, and a cataloger can never afford to pass it over. Certain chapter headings will at once suggest further investigation, such as: "A brief history of the subject," "Conclusion," or "Summary chapter." These latter usually give a digest of the author's views and often furnish the kernel of the book. Some chapters may also suggest subjects to be analyzed.

In miscellaneous books, such as Essays, Plays, Lectures, and Speeches, if the title fails to show the contents covered

by the book, the catalog should give a list of the chapters so that the reader may select the special subject or chapter he is seeking. Books in several volumes having a distinctive sub-title in each volume should be treated in the same way, and if *the title* is not full the contents should be cited when it is concise enough to show what the book includes and is not too long. (A.L.A., 167.)

It may not be out of place to mention here that the table of contents in most foreign books is placed at the end rather than at the beginning of the volume.

XI. Introduction

The preliminary discourse or note, usually following the table of contents, is called the Introduction. It sometimes forms the first chapter of the book, and gives a more elaborate development of the author's subject than does the preface. Its object is to present some historical, literary, or scientific facts destined to facilitate a comprehension of the work. It may have more value to the cataloger than the preface.

It is a common practice for the introduction of a work to be written by a person other than the author of the book, in which case the introduction has a value apart from the book itself, e.g., the introduction to Sheridan's *Rivals* by Brander Matthews might be of great interest and value to certain readers, and it may appear in the catalog under Matthews.

XII. Index

The index may be defined as a detailed alphabetical list of topics, names, and subjects treated in the book, with exact page references. It is usually printed at the end of the volume.

The table of contents gives a systematic arrangement of the material in the book while the Index gives a *detailed* alphabetical list. Usually the index to a book is not consulted unless a specific topic is wanted; however, the cataloger should glance through the whole index to be reminded of subjects which are included and which differ from the main

subject of the book. Take, for example, a descriptive book on South Africa. The question at once comes to the mind of the cataloger: What does this book describe aside from the scenery and manners and customs as revealed in the table of contents? This question is answered by perusing the index, and often one catches such an entry as "Diamond mines," showing from twenty-five to fifty pages given to this subject. In this case the book must be analyzed and the additional subject matter made available.

If works are made up of several volumes, of which one or more are index volumes, these index volumes should be indicated.

XIII. Bibliographies

A bibliography is a list of books of a particular author, printer, place, or period, or on any particular theme; the literature of a subject (Cutter). In a broader sense it may be made to include lists of patents, artists' productions, etc.

Bibliographies are cited at the beginning or end of chapters, in footnotes, or at the end of the book. The books so listed may serve the cataloger to place the book in hand, with other books of like kind, for in studying the titles in these bibliographies the cataloger discovers the sources the author has used, or those he recommends as contributing to the subject under discussion. Every aid of this kind is useful in getting like books classified together.

Bibliographies are also very *important to the reader,* and should always be called to his attention. If he is interested in some special subject, he is always on the alert for new titles, and these bibliographies suggest new references.

Chronological lists of an author's works add value to a volume of literary criticism or biography; bibliographical information found in a list of patents cited in a technical book is of great importance to a scientific man; a list of pictures painted by the artist under discussion will perhaps give the reader just what he most wants about a particular artist. These bibliographies often have the same value as a separate book and contain information not available in any other form.

XIV. Signature

"Signature is the letter or other mark to be found at the foot of the first leaf (and generally of one or more following leaves) of a gathering,[1] and its purpose is mainly to guide the binder in the arrangement of the gatherings."[2]

XV. Books Having No Title-page

If the title-page of an old book has been torn or lost and there is no cover title, running title, or binder's title, it is extremely difficult to identify the book. In this case one must examine the gatherings to see if they by any chance bear the title of the book. With this as a guide one can consult other catalogs, biographical dictionaries, or reference books, to identify the book in hand. After one is convinced that the identification is accurate, the entry as found can be accepted and used by the cataloger. A typewritten title-page should be pasted in the book by the cataloger to save the time of others in making a duplicate search.

XVI. Collation

That part of the description which specifies the volumes, pages, illustrations, plates, maps, and other illustrative material constituting the book is included in the term collation. (A.L.A.)

The value of these items to the reader is variable, depending upon the group using the books and the character of the book collection. If one is making a comparative study of editions, all these items may be useful, because they designate certain features which differentiate one book from another. If the book collection is made up of rare books which have unusual bibliographical worth, it would be necessary to designate these details.

For the average library their use may be considered essential in some instances and non-essential in others. The staff,

[1] Gatherings are the printed sheets of a book folded to the format of the book.

[2] McKerrow, R. B. An introduction to bibliography. Oxford University Press, 1927, p. 73.

as well as the readers, must be considered in determining the value of collation items. The items here enumerated will be taken up separately and their value pointed out.

1. Volume. Volume may be defined as a book distinguished from other books or from other parts of the same work by having its own title-page and usually independent paging. (A.L.A.) The volume is an abstract division made by the author separating the distinctive parts of his work. Sometimes the division by volumes corresponds to the divisions by binding, but one volume of a work may be bound in 2, 3 in 1, 6 in 3, and so on. The volume numbers should always be noted when there is *more than one,* for the reader when calling for a book must know how many pieces go to make up that work.

2. Pagination. Paging may be defined as a system of signs and numbers by which the consecutive pages of a book are indicated. In a paged book each leaf is numbered on both sides, and each of these sides is called a page. The right side, as one turns the leaf, is the recto, and the left side is the verso. Half-title-pages, title, preface, and content pages, or other preliminary matter not included in the main paging are spoken of as "preliminary leaves" in library practice.

The importance assigned to the details of paging when cataloging books is measured by the character of the library. Very accurate paging must be used when rare books are described, or when very full cataloging is being done, as in university libraries. But a public library, circulating fiction and popular books, would not need to do such meticulous work. The main paging would suffice, and some libraries omit even this, especially in works of fiction. For the large library the item has a rather important use for the Order and Catalog departments in identifying editions. Frequently in replacing books it is necessary to verify the paging to be sure that the edition ordered or received is a duplicate of the one withdrawn. The value of this detail to these departments should be considered in this connection.

3. Illustrations. In a restricted, but popular, sense, the

term "illustrations" is used to include all kinds of display matter included as frontispiece or inserted in the text of a book.

The value of illustrations to the reader is relative; to certain classes of books pictures add much interest, while in other cases they add nothing. Art books, travel books, books of costumes, and nearly all books for children need illustrations to elucidate the text, and mathematical and engineering books need diagrams to interpret problems. Except in these cases where illustrations greatly enhance the value of books, the cataloger need not mention them particularly.

If one considers illustrations in a still more restricted sense, he may class them as follows: plates, photographs, portraits, maps, plans, facsimiles, tables, diagrams. Any or all of these details may be of value to the reader, depending again on the subject treated and the demands made upon each library.

a. Plates. Plates may be defined as full page illustrations usually printed on special (heavy) paper, one side of the leaf being blank. Plates are not as a rule included in the pagination. They may be bound in the book or loose in a portfolio.

b. Photographs and portraits. Photographs and portraits contribute so much to biographical books that the cataloger is justified in noting them, but he would hardly be warranted in specifying them for all books in other classes.

c. Maps, plans, facsimiles, tables, and diagrams. These special illustrations do not need to be defined here since they are well-known terms. They are generally used only in classes of books where the text needs elucidation. Maps add to the value of histories and books of travel; plans are important in architectural books; facsimiles are most necessary to the student of autographs and epigraphy; and tables and diagrams are useful in statistical, mathematical, and engineering works.

Libraries specializing in any of these subjects, as well as large libraries, would certainly be obliged to note the fact that these details exist in certain books. Small libraries would probably not find it necessary to specify any of them, except maps in works of history.

4. Size. The size of a book may be shown by giving the exact measurement of its height, in inches or centimeters, or by citing the number of pages. Neither of these measurements alone gives one a true picture of the extent of the printed matter included. A book of three hundred pages may be made up of small or large pages or these pages may have narrow or broad margins. Again, the cover of a book may be very high and very wide, but it may contain only four or five pages. To show the reader how much reading matter he is getting in a certain book, both paging and height should be given. Small libraries are not warranted in spending the necessary time to give size, while many large libraries will want to use it. Before deciding to omit this item entirely, one must consider another aspect of the question, namely, the shelving of the books which are over a certain size. The large majority of books in a library are octavo in size, approximately 25 cm or not more than 25 cm in height. Since this is true, the main shelves should be arranged for these books, and the books which are quarto, or over, should be stored in specially arranged shelves which are extensive enough to take all quartos and folios, or all books over 25 cm in height. All such books which are shelved apart from the regular octavo volumes must be marked with a special symbol to show their location. This designation is usually made a part of the call number so that the book may be quickly located. This is touched upon again in Chapter VI.

XVII. Summary

By means of this thorough examination into the make-up of books the cataloger (1) can discover facts which, when applied to the catalog, assist the reader in his choice of books, and (2) can gather suggestions from books which lead to investigations about the author and the subject as well as to the correlation of the individual book with other books of like kind.

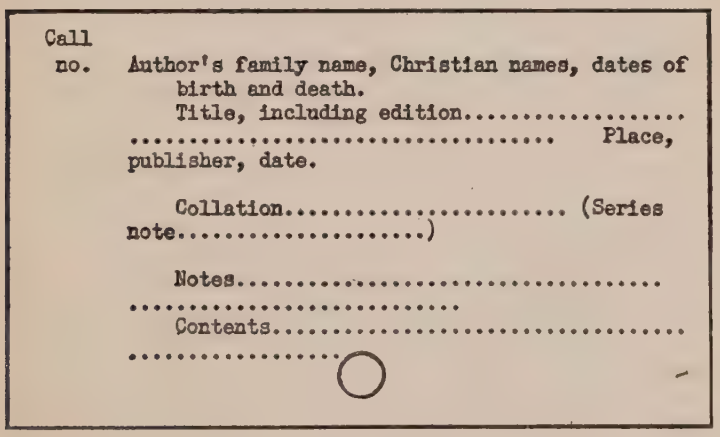
Certain items yielded by an examination of the title-page and other features of the book, mechanical or bibliographical, are essential for the identification of the book for any library,

whatever its size and character. Other details are relatively important depending upon the character and use of the collection. Items essential for any collection, whatever its size, are: author and title (including edition) usually on the title-page; those generally desirable, and essential for most collections, are place, publisher, and date; those which vary with the library are collation, contents, and other notes.

Uniformity in library practice does not seem justified in many details; there is no reason why the small library should keep repeating unnecessary minutiae. Certain bibliographical details may be indispensable for scholars, that is, for readers in university libraries and for students of rare books; but in the average public library there may be many more telling ways of assisting the reader than in laboriously citing detailed information which he would use but rarely, and which he could obtain from the books themselves, or from bibliographical reference books if needed.

XVIII. Outline Form for Making a Catalog Card

As soon as one begins a study of library science he will be called upon to copy references from other catalogs and to compile lists of books and bibliographies. It is, therefore, very important to know the correct cataloging forms. There



is a generally recognized way of preparing a catalog entry and the sooner one learns this generally recognized way the better.

Explanation: The skeleton catalog card is pictured to show the order and indention followed in preparing a catalog entry.

Words such as *Author, Title, Collation,* are to be replaced by these items.

The items *Title, Collation, Notes, Contents,* are indented to subordinate them to the author heading, but if these run over two lines, or more, these added lines take the indention of the author, so that a paragraph form for the whole entry will be preserved.

The only *word* now on the skeleton card which is ever retained is the word *Contents.* All others are replaced.[1]

References

Brown, J. D. How to transliterate imprint dates in early books. In his Library classification and cataloguing. Grafton, 1912, p. 241–43. Adapted from Brown's Manual of practical bibliography. Dutton, 1907.

Holden, J. A. The bookman's glossary. Bowker, 1925.
Includes terms used in producing books and in their distribution.

Imprint, collation, series note. In Catalog rules: author and title entries. Compiled by a committee of the American Library Association and the (British) Library Association. A.L.A., 1908, p. 45–56.

International Congress of Publishers. Vocabulaire technique de l'éditeur en sept langues: Français, Deutsch, English, Español, Hollandish, Italiano, Magyar. Berne, Congrès international des éditeurs, 1913.
A very full list. The terms of the various languages are arranged in parallel columns, alphabeted according to the French, but with an index for each of the other languages.

Moth, A. F. C. M. Technical terms used in bibliographies and by the book and printing trades. Boston Book Co., 1915.
English terms and equivalents in six other languages.

Walter, F. K. Abbreviations and technical terms used in book catalogs and in bibliographies. Boston Book Co., 1912.
Abbreviations and terms given in English, French, German, Danish-Norwegian, Dutch, Italian, Latin, Spanish, and Swedish. Supplemented by Moth's Technical terms.

[1] A more detailed explanation and a model card are given in Chap. VII.

Thought Questions

1. Select several books and analyze the items on the title-page which you consider useful for the reader.
2. Familiarize yourself with book technique by going to the shelves of a library and finding the following:
   a. A book in which the title-page title differs from the binder's title
   b. Three books showing a difference in fullness of the table of contents
   c. Two books listing bibliographies
   d. Two books written by the same author but having different forms of personal name on the title-page
   e. A book in which two authors are mentioned on the title-page
   f. Several different editions of a well-known work
3. State in what way the following citations, which have been taken from actual books, are inadequate:
   a. Chamier's *Life of a Sailor,* Preface to 2d ed., Chap. XVIII
   b. Report of acting-Commodore Crease, Sept. 1, 1814; Niles, VII, supplement, p. 150
   c. Campbell's *History of Virginia,* quoted by Mr. Tyler, *History of American literature,* vol. II, p. 261
4. How would you interpret the following designations about books if you found them in a library catalog:
   a. v. 1-3. 1910-13
   b. 2 pts. in 2 v. 1913-14
   c. Ed. 2. 4 v. 1859-62
   d. Contains facsimile of original title-page, Leyden, 1638
   e. Ed. 2, rewritten & enl. 2 pts. in 2 v. 1913
   f. Translated from the fourth German edition
   g. Avec une introduction sur sa vie et ses ouvrages, tirée de sa correspondance inédite, par Victor Cousin
   h. A new ed. rev., cor., and enl., by Joshua Toulmin
   i. [n.p., n.d.]
   j. Londini, Sumptibus societatis, 1737
   k. . . . 253 tafeln in farbendruck mit textband . . . München, H. Schmidt c(1921–25)
   l. Traduction effectuée d'après la 2e édition russe (entièrement revue, refaite et complétée par l'auteur) par Léon Dlougatch
   m. Delafield, E. M. (pseud. of Edmée Elizabeth Monica De la Pasture)
   n. Alumni number; comp. by H. (sic) H. Botsford.
5. Copy on cards all items from three Library of Congress printed catalog cards, giving special attention to indention, order of entries, spacing, and capitalization.

Chapter III

The Grouping of Books—The Classification Schedule

I. Introduction to Classification
   1. Need for arrangement
   2. Books are written to answer needs
   3. Factors leading to the accessibility of books
   4. Group arrangement
   5. Policies of classification
   6. Subject chart—Railroads
   7. Some terms with definitions

II. Type Study—Architecture
   1. First group—General books
   2. Second group—Architectural details
   3. Third group—Styles of architecture
   4. Fourth group—Special classes of buildings
   5. Fifth group—Architectural design and decoration
   6. Sixth group—Miscellaneous
   7. Seventh group—Books for special classes of readers
   8. Summary

III. The Classification Schedule
   1. Definition
   2. Notation
   3. Limitations of a schedule
   4. Working with the schedule
   5. Value of the schedule to staff and readers
   6. Qualifications of a classifier
   7. Points stressed in a classification system

In the preceding chapter we studied the book as a *unit* and found there a technique of use to the cataloger in his examination of books.

In this chapter we shall study books as groups in order to arrive at some of the underlying principles governing their arrangement on the shelves. This study will introduce (1) some problems and principles of book arrangement which should be realized before the study of a definite classification schedule is undertaken, and (2) the make-up of the classification schedule.

Books will be considered to determine their content value, and to see how this element may be used as a medium for grouping them. Volumes will be considered not as *mere printed pages* bound in covers, but as vehicles of information.

While principles of book classification will be introduced, these can be treated only briefly, but the student is referred to three very excellent books on classification. These are by Dr. E. C. Richardson, W. C. Berwick Sayers, and W. S. Merrill and are listed in the bibliography at the end of this chapter. They should be read by anyone wanting a more exhaustive account of the subject.

I. Introduction to Classification

1. Need for arrangement. If one should study the questions which come to libraries it would not be difficult to realize the great demands made on book collections both inside and outside of the library building. For example, in one of the large public libraries during one year 27,222 questions were answered by the reference department of the central library alone, and 1,807,377 volumes were circulated by this library for home use during the same period. The selection and handling of books involved in answering such demands make apparent the need for a very definite system of arrangement for the volumes on the shelves.

Inquiries come for books by certain authors, and by specific titles, but the majority come for a definite (sometimes indefinite) subject. A single book may satisfy the reader, and again a whole group of books may have to be consulted before he can be served. It is more often a case of being unable to locate the right book than that the library has no book which answers the question. Therefore, it is imperative that the library adopt a system for allocating its books which will make possible prompt and effective service. Attention must be directed to giving quick access to an individual book, and also to groups of books so that they can be used comparatively.

2. **Books are written to answer needs.** Fortunately there is a close connection between the way men write and

the way men think; therefore, there are usually books ready to meet the various requests; in other words, books naturally fall into usable groups. There are not only many books treating of the same subject, but there are those on each subject which are written in ways suitable for different types of readers. The general book appeals to the person who wants a broad treatment of a subject; the specialized treatise satisfies the scholar in search of minute detail. Thus we find books answering the demand of the general reader and of the specialist as well. Carrying this analogy between books and readers farther, we find textbooks for the student; the simplified text for the child; poems, dramas, and essays for the lover of literature; encyclopedias for the one in need of first aid. This practical use is a basis for a convenient order. As Dr. Richardson has said:

> "Libraries are not gotten together as a museum to exhibit what we have called the fossils of knowledge. . . . The books are collected for use. They are administered for use. They are arranged for use; and it is use which is the motive of classification. . . . In an unclassified library the books are classified over again every time a man wants to use them. It is a labor saving device to assemble them in classes for all instead."[1]

3. Factors leading to the accessibility of books. If *use* is the motive of classification, the librarian must look for certain desirable factors in arrangement and select a method of grouping books which will be logical and at the same time convenient for service.

The following four points may be worthy of consideration in this connection.

a. Like books brought together. Books should be grouped so that they can be used relatively. The person who wants to know what the library has on a certain subject does not want one or two books; he wants to select from many those which will best meet his needs. The same is true of the reference librarian who should be able to go to the shelves and find all the books on one subject together, ready for use.

[1] Richardson, E. C. Classification. Scribner, 1912, p. 26.

b. Related books in close proximity. If every book takes its relative location on the shelves, it will stand near others with which it can be correlated. In this way one subject merges into another and through this arrangement related topics bearing on a main class will be brought into relief, and the user is led from one subject to the next most closely related.

c. Possibility of inserting books into the organized groups. Demand makes it desirable to have recent accessions accessible in their proper places with other works of like kind. This means that the shelf arrangement should be flexible, so that volumes may be inserted in their proper groups. The arrangement should permit continued moving of books from shelf to shelf without destroying their logical order. Their location must not be fixed, but relative.

d. Means by which books can be returned to shelves. A symbol must be provided for marking books so that they will automatically get back to their correct location. The books on Shakespeare must not get back on the shelves with those of Bacon and so open an old feud, nor must those on economics wander into the history alcove and upset the professor who is already watching to see that his books are not classified as history.

4. Group arrangement. To accomplish an arrangement which will meet the above requirements it is necessary to consider (a) the principles of group arrangement, or book classification, and (b) the function of book notation.

a. Definition of classification. Classification is in its simplest statement the putting together of like things, or, more fully described, it is the arranging of things according to likeness and unlikeness. It is the "sorting and grouping of things,"[1] but in addition, "Classification of books is a knowledge classification with adjustment made necessary by the physical form of books."[2]

b. Adaptability of books to classification. In looking for

[1] Richardson, E. C. Classification. Scribner, 1912, p. 1.
[2] Sayers, W. C. B. A manual of classification. Grafton (Wilson), 1926, p. 72.

likeness in books one is conscious at once that both form and content may be considered. It has already been observed that every book has both a physical and a content value. Either of these elements might be used as a basis for their arrangement. We might, for example, class all books by size, but by adopting this plan we should get an accidental likeness of our object which has no relation to its content. Such an arrangement would not answer the questions relative to subject, author, or title. It would defeat our purpose in attempting to arrange books so that they may have the greatest possible use. Books are not used because they are octavos or folios; they are used not because of their physical make-up, but because by giving a printed exposition of subjects they provide the answers to specific questions. They are selected by readers because they have a text which interests or will give information, and it is this information along with use which must be considered in selecting a method of arrangement.

When one begins to look *within* books for answers to the four requirements mentioned above, the opportunities narrow down to an author, or a subject arrangement.

Author arrangement. If the arrangement by authors is adopted, books by the same writer will stand together irrespective of the subject. This is not a bad arrangement for those authors whose works belong to *belles-lettres,* because works falling into this class are seldom sought from the subject side; they have more literary value than subject value. These are frequently grouped (1) by language, (2) by form, as poetry, drama, essays, etc., and (3) by the name of the author. By this method all English poetry, for example, is brought together and the individual books within this group are arranged alphabetically by author. While this is not primarily an author arrangement, it is the author's nationality which determines the arrangement within certain form groups. This class of books is called in library parlance the "Literature class." Author arrangement within this class meets a real demand and no principles of classification can ignore this.

These author groups share the nature of subject groups, as the convenience of this arrangement by authors is limited to certain specific types of literature.

On the other hand if books having decided *subject* value are arranged by the names of the persons writing them, without consideration of the subject content, the person who wants to see what the library has on Gothic architecture, for example, will have to know what writers have treated this subject before he can find the books. Author arrangement usually answers one of two questions: (1) Has the library a book by a certain definite author whose name the reader knows? and (2) What books have been written by a certain definite author whose name the reader knows? Such an arrangement would not bring together books on the same subject. The approach to the shelves would be limited to author, and while there is a decided need for such an approach (and most classification schemes provide for it in Literature), it is by means of the catalog and not the classification that books are found from the author side.[1]

Subject arrangement. In looking for likeness in *subjects* of books one recognizes at once a base for arrangement which will bring together large groups of books, and one which will probably best answer the majority of demands made on the collection. As books are merely the written expressions of knowledge it follows most naturally that it is this element which must furnish the classifier with his key for arrangement. It is this *knowledge* in books which must be classified in order to bring together information contributing to one and the same class. Books on science, art, religion, birds, or history are wanted for the subject matter they contain regardless of size, title, or even authors. Such a grouping eliminates the need for an aimless examination of perhaps hundreds of books when a special subject is needed.

5. Policies of classification. It is in the study of resemblances that one finds differences. It is the adjustment of these differences in books when treated in groups, which add complications to the problems of classification. Nor does the

[1] The author catalog is discussed in Chapter VIII.

problem rest with the classification of one book; it is in the placing of a book in its proper relation to others, and the correlation of groups of books in a logical whole which requires study.

It is not difficult to determine the classification of books which belong to the large classes, or even the large divisions of these classes; the chemistries are easily separated from the books on botany, and the United States histories are not confused with those treating of the history of Germany. It is when one begins to differentiate between closely related topics that difficulties are encountered. *Subjects overlap* and blend into each other making it difficult to know where one begins and the other ends. For example, when does a book on railroads belong to the economics group and when to the engineering group? Again, should the books on heredity be kept with evolution or with physiology, or should they be kept in a group by themselves, thus taking important books away from these two large classes?

Groups of books devoted to one field must be kept as complete as possible, but the classifier will realize that in order to accomplish this some sacrifices must be made. For example, if it has been deemed best to classify archeology with history, it must be understood that some good material on this subject is going to be kept out of the architecture group, and so weaken that section. Likewise, if volumes treating of gold mining in South Africa are classed with the other mining books of that country, the group treating of gold mining in general will be deprived of some excellent contributory matter. In making a choice the class is taken where the greatest demand comes, but frequently this is not marked.

The purpose of the library is a determining factor in formulating policies of classification. The *special library* will tend to focus all books towards the one subject in which the library is specializing. For example, in an engineering library each book will be examined to detect its value to the engineer. The books on railroads will naturally be crowded into the technical rather than the economic group even if it is necessary to stretch a point.

The specialist is continually drawing into his own field much contributory material but very definitely outside it. It is in this type of library more than any other that *use* should determine its classification. Special libraries will either use a scheme adapted to that type of library or adjust a general scheme to its special needs. This is a problem outside of the scope of this book.

The *public library,* which is not providing books for one special type of reader, will distribute its railroad books, shelving some in economics, some in transportation, and some in engineering, often being influenced by the purpose of the individual book, because demands come for all phases of a subject.

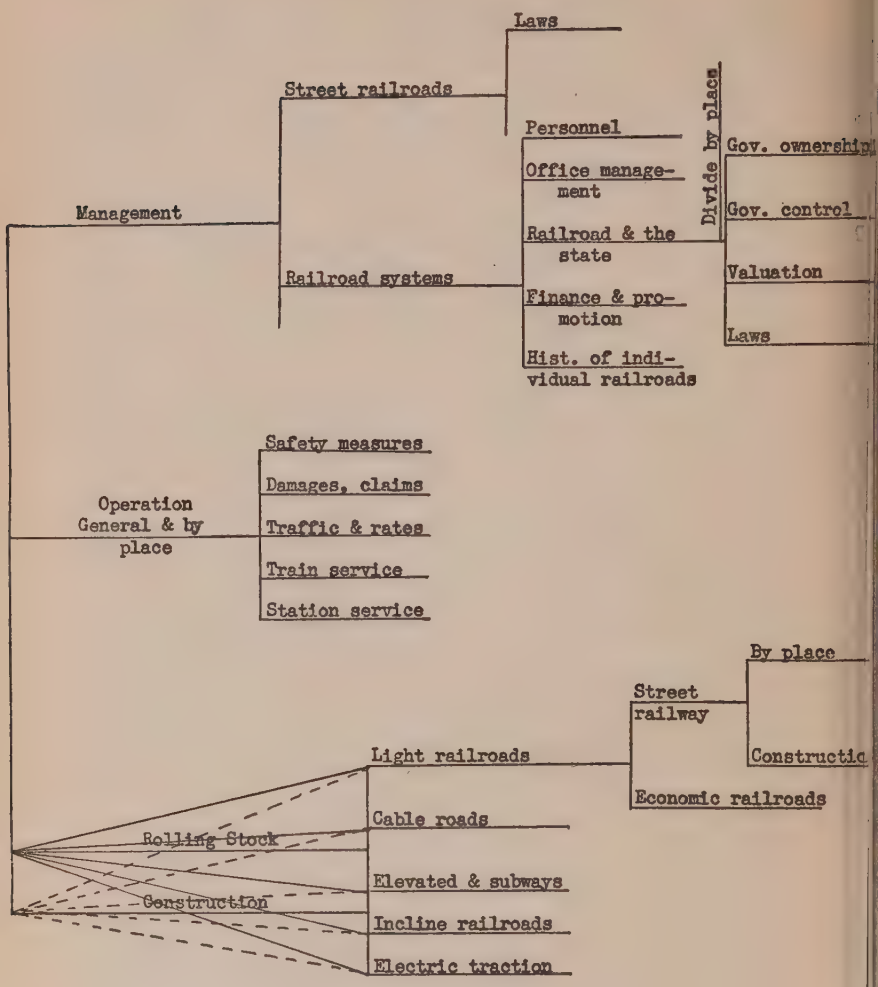
The *university library* will be in more of a quandary than the other two, because there will doubtless be, for example, a department of economics and also a department of engineering, both wanting all books on railroads; and there will be the central library attempting to serve the reader who is not specializing in either phase of the question but who wants to find these books in one place under transportation. If one group is kept complete all others must suffer. The sacrifice comes in this case in not finding all the railroad material together.

6. Subject chart—Railroads. It is a continual surprise to those who work with books to see the extent to which one field may be developed. Not until hundreds, or even thousands, of volumes have been examined can one fathom all, or even a part, of the intricacies of subject classification.

In order that the student may visualize the extent of one small subject as treated in books, the following chart has been prepared showing the subject arrangement of the books on railroads in one library. This chart includes only the main subject and its main divisions. No auxiliary subjects such as railroad bridges, tunnels, and locomotives are included.

7. Some terms with definitions. The following definitions are introduced before beginning a study of a definite group of books.

Broad classification. An arrangement of subjects in



RAILROAD CLASSIFICATION CHART

classes, divisions, or sections instead of in their more minute subdivisions.

Close classifications. An arrangement of subjects in minute divisions as under a class or division. Close classification is *minute* classification.

Division of a subject. Subjects or topics subordinate to a class. The gradation in classification is expressed as follows:

Class
Division
Subdivision
Section
Subsections
(followed to any degree required)

Fixed location. A system of marking and arranging books by shelf and book marks so that their absolute position in room, tier, and on shelves is always the same.

Flexible classification. A classification which will allow of intercalation of new subjects without destroying the sequence or logic of arrangement.

Form. (Term) A term applied to works (books), the contents of which are so written or arranged as to have a special use. Such works may have subject value, as a *dictionary of music,* or they may abandon subject for style or form of writing, as *drama, poetry, fiction.*

Form division (in classification). A division assigned in classification schedules for classifying books defined above.

Relative location. An arrangement of books according to their relations to each other and regardless of the shelves or rooms where they are then placed. Relative location, like a card catalog, admits indefinite intercalation; the books can be moved to other shelves or rooms without altering call numbers.

II. Type Study—Architecture

In order to give a practical demonstration of how books in one class naturally classify themselves and also to illustrate

some of the principles of classification, a special subject has been chosen to be used as a type study. Architecture, a division of the class Fine Arts, furnishes good examples from which certain deductions can be made.

We shall assume that we have a collection of one hundred or more books which are to be thrown into main groups, and that a second grouping within the main grouping may be necessary. By finding first the likenesses in books we shall discover their differences, and group them in such a way as to show the gradation of subjects within these groups. Book titles illustrative of the points to be made will be introduced, that the problem may be made as practical as possible.

1. First group—General books. The first book is H. H. Statham's *Architecture for general readers* covering several phases of architecture treated in a general way. The book is not limited to construction, periods of architecture, types of buildings, or architectural details; it cannot, therefore, be confined within any one subdivision of the main topic; it is merely a *general* book on architecture.

A book is said to be general when it treats a subject broadly without giving undue emphasis to any one aspect of the subject.

This type of book is common to all classes, divisions, and even to some of the subdivisions and sections; therefore, it is a type which must be provided for in any classification plan.

Because the contents of general books are inclusive, they are logically placed at the beginning of the large class, or division, on the shelves. Thus, we begin each large group with the books embracing what we may call a bird's eye view of the subject.

a. Form books. Within this group are architectural dictionaries, manuals, periodicals, essays, historical treatises, etc., which are also general in their treatment but too miscellaneous in character to be limited to a specific subject subdivision of the large class. They are, however, different one from another and because of this difference it would be convenient to find books of each type in a group differentiated from the general book but in close proximity to them. By such a plan all archi-

tectural dictionaries, for example, will be together on the shelves where they can be used comparatively.

As the subject of the books in these groups is the same as the subjects in *general works* we must look for some other difference which will set them apart, and we find that the difference is in the *form* of treatment. They may not give an orderly, continuous account of our subject, as does a general treatise; or they may be written to show the psychological or historical trend of the subject. A form of make-up has been adopted which gives them a very decided use. For example, dictionaries have been written for quick use, and to answer briefly a multitude of questions; manuals are condensed treatises; periodicals are miscellaneous in content and are useful for recent information. Their *use* demands that they stand apart from the General books. They are called *form* books.

One of the most important methods of treating a subject is the *historical.* James Fergusson's *History of architecture in all countries* is a book treating the subject of architecture in such a way as to show its historical trend. This book is not limited to country, but we find in our next book, *Historical monuments of France,* by J. F. Hunnewell, a work written in the same historical method, but limited by place. Now we have two books written in the same *form* but with the difference that one gives an exposition of the historical trend of architecture in general, and the other presents architectural history as limited to France.

All *general* histories of the subject should stand together and should precede the histories of the subject in a special place.

We now have three types of general books: (1) the book which is not limited to any subdivision of architecture, but treats the whole subject broadly; (2) the general book which is limited by form; (3) the general book which is limited by form and place.

b. Two subjects in one book. Another type of book is one in which two subjects are treated together. A book may treat of two, or even more subjects. The planning and con-

struction of skyscrapers will illustrate this type. The author in this case writes the book for the architect, and for the constructing engineer, or builder. The work of each of the specialists complements that of the other. The architect, for example, is interested in both the practical and artistic sides of construction; his work naturally touches that of the builder. The author may quite naturally treat these two aspects of construction together under one cover, and the difficulty of arrangement arises because the book *is* under one cover. We cannot split the volume in order to arrange one part under Architecture and one under Engineering, or Building, and yet the two subjects contribute to two main groups having equal value. If the book gives more emphasis and space to the architectural side of the subject than to the practical construction problem, the book must be shelved with architectural books, but if greater emphasis is given to the practical construction it will have to stand with the engineering books. A book of this type proves at once that one cannot depend on the shelves alone to reveal the complete resources of the library on any subject, because a book, being an individual unit, can be in only one place even though it treat of two or more subjects. Neither subject will be neglected because again the catalog will take care of both, as will be developed in later chapters.

c. Definitions. The example above reveals a pitfall which the classifier must avoid when dealing with one subject which borders closely on another. The classifier must know definitely the difference between the work of the architect and the constructing engineer or builder, in order to prevent errors in classification. One subject (Architecture) belongs to the class Fine Arts while the other is a subdivision of Engineering or Useful Arts, and though the two may be treated in one book, they may also be treated separately. When they are treated separately, they must be classified in two very different fields, and definitions must be drafted which will insure the correct interpretation of each subject and so remind the classifier how the two groups may be kept accurate as to type.

If we consider our illustration as two books we find the architectural treatment limited to design and theoretical planning in their relation to appearance, style, and general utility, while the engineering presentation covers the subject of actual construction, the handling of material, strength of materials, methods of welding, and other technical engineering methods. Without keeping in mind these definite distinctions, policies of classification cannot be kept uniform; and lack of uniformity of purpose means that books become scattered, and accurate work is impossible.

2. Second group—Architectural details. The second group becomes necessary because in sorting the books we find a certain number treating very definitely of architectural details. Many of these volumes consist of drawings and designs showing such details as windows, doors, and arches. These details may be treated as chapters in one book, or a whole book may be given to one topic only, as doors.

a. Broad versus close classification. In a case of this kind the classification may be broad, or close, depending on the size and kind of library. By broad classification we mean the grouping of books in classes or divisions without recognizing the more minute subdivisions. If broad classification is followed here, all books on architectural details will be together on the shelves, but all books on doors will not be in a group by themselves. If close classification is adopted the general books will stand first, followed by the books treating of special details grouped separately.

The very small library having few books on architecture will find it unnecessary to subdivide them into small groups. The medium sized library might need only the group of architectural details, while the large library will subdivide even this group and set aside the books treating of specific details such as doors, windows, or arches. The special architectural library will further subdivide, and have more than one minute group under doors, as iron doors, wooden doors, and glass doors; and also special types of doors, as swinging doors, revolving doors, and shutter doors. In classifying closely, the most minute analysis of a subject is shown.

3. Third group—Styles of architecture. Such books as *An investigation of the principles of Athenian architecture,* by F. C. Penrose, *Romanesque architecture in France,* edited by Julius Baum, and *Guide to Gothic architecture,* by T. F. Bumpus, make a third group necessary. These books could not be shelved with the books on *general* architecture, neither could they go with the group on architectural details. They are different because they introduce an entirely new phase of the subject: *the Style* of architecture. Here the period arrangement seems the most logical to introduce, because very definite styles were created during certain epochs, which were the expression of the taste of the people of those times. Medieval architecture gave us the Byzantine, Moorish, Romanesque, Norman, and Gothic, and it is logical that these styles should be studied together. Another division can be made for Modern architecture, where we will find the Renaissance, Baroque, Greek revival, Elizabethan, and other types.

By this method of arrangement the reader will find books on these subjects arranged in such an order as to show the historical development of style. He will also be able to see all the books of one style together. The Byzantine group will precede the Romanesque; the Romanesque will precede the Norman and the Gothic, and so on, and each of these divisions will be complete in itself.

a. Intent of the author. Considering the book entitled *Romanesque architecture in France,* one is immediately conscious that this will appeal to two different groups of readers; it will interest the person who is making a study of architecture in France, and it will likewise appeal to the student seeking information about the Romanesque style of architecture.

Shall we classify the book with the style of architecture, or with the history of architecture in France? In answering this question the classifier will take into account the intent of the author and also ask himself whether there is more demand for these books from the point of view of style or country. If the author, in his preface, or introduction, tells us that he is writing a series of books on architecture in France, and that

this is one of that series, it may be wise to keep the book with other architectural books treating of France, rather than to lose the continuity of his series by classifying the book with the style treated. But if the author's intention is to interpret and study the Romanesque style, using the monuments of France as an illustration, he has given us a book on *style* only. A *history* of architecture in France could not be limited to *one* style, but would have to include many styles if it carried any weight as history. This illustrates the point made in the second chapter, where the value of the preface and introduction to the classifier was pointed out. The author's idea of the meaning of his book will often point the way to its correct classification.

4. Fourth group—Special classes of buildings. Types of buildings form a fourth group which may be illustrated by such books as *Municipal architecture in Boston,* by E. M. Wheelwright; *Healthy hospitals: observations on some points connected with hospital construction,* by Sir Douglas S. Galton; *Cathedrals and churches of Northern Italy,* by T. F. Bumpus. This group can naturally be subdivided into definite kinds of buildings, such as government buildings, hospitals, religious buildings. We may go even further in our subdivisions if necessary, and bring individual buildings of a certain place together, such as commercial buildings in New York, and if we wish to be more minute, we may have a group given up to books treating only of one building, as the Woolworth building.

a. The catalog must supplement the classification. A relation drawn between the arrangement on the shelves and in the catalog may not be out of place here, since it is illustrated by these books.

The reader will frequently ask for a very definite topic such as an individual building. This type of question is difficult to answer by going directly to the shelves, because as was illustrated above, the divisions and subdivisions become too numerous and involved to locate easily so specific a book. Therefore the catalog, having its book entries in an alphabetical rather than a logical arrangement, will answer the

question as to the location of the book much more quickly than the shelf groups. Such a book will be found listed in the catalog under its own name: *Woolworth building.* This direct reference is most useful when one is searching for a very definite thing, and it illustrates the great difference between a logical group arrangement of books and the simple alphabetical arrangement of entries in the catalog. The logical arrangement of our shelves allows us to survey a whole field of knowledge, while the alphabetical catalog, discarding all logic, allows us to make a direct approach to the one thing we have in mind, regardless of its place in any logical scheme.

b. Subject versus regional classification. Some classifiers prefer to class all individual buildings with other books describing the place. For example, the book on the Woolworth building would stand on the shelves with other books descriptive of New York City. One gains by such an arrangement a complete collection of books describing every phase of New York City, and one loses from the architectural group a very important type of commercial building. Consideration must be given not only to the value of an individual book, but also to the value of the relative location of a group of books. In the architectural library there is no question; the book would, of course, be classed with architecture. But in a general library the same book might be more useful if classed with other books on New York City. *Use* should determine the decision in such a case.

5. Fifth group—Architectural design and decoration. When we find two books such as *Art of the plasterer; an account of the decorative development of the craft* and *Examples of Mediaeval foliage and coloured decorations taken from buildings of the 12th to the 15th century,* it is apparent that another group is necessary. These books cover only the subject of decoration, considering problems of construction, style, or historical development only as they have to do with decoration applied to buildings.

a. Classify by application. These books fall into a group which we will call *Architectural design and decoration.* They treat a definite subject in its application to another definite

subject. It is decoration limited to the ornamentation of architectural works of art. On the other hand, design and decoration are subjects having a bearing also on many other forms of art; there are books on interior decoration which treat the subject quite apart from any architectural bearing. Such books take up furniture, carpets, tapestries, wall paper, and all the movable ornaments which serve to decorate the house after it has been constructed. The decoration from the architectural point of view is fixed; it is a part of the permanent structure, as decoration of ceilings, window tracery, decorative brick and terra cotta, woodwork or iron-work. This subdivision of architecture illustrates the point that one must know subjects to the extent of realizing how the *application* may determine their logical grouping.

6. Sixth group—Miscellaneous. Some books always baffle the classifier. Either they do not seem to fit into any one of the natural groups, or they may treat the subject with so definite a purpose that one is puzzled to know just where the book will be most useful. The main subject may be architecture, but the author's method of treatment may make its grouping difficult.

Architecture among the poets, by H. H. Statham, is a book of this kind. It is a collection of quotations containing allusions to and descriptions of architecture, selected from English poetry, with commentary by Mr. Statham, a writer on architectural subjects. Shall the volume appear on our shelves with other books on English poetry, or shall it take its place with architectural books? The book was evidently compiled for the architect, its interest is centered on this subject; therefore, if we follow the rule to consider subject before form, the book would be classified with others on architecture. The fact that the compiler had added his comments gives another reason for keeping the book in the architectural group. It is impossible to formulate definite rules for classifying books of this type. One must use his judgment after considering the subject treated, the intent of the author, the form in which the subject has been presented, and, above all, its probable *use* to the reader.

7. Seventh group—Books for special classes of readers.

a. Children's books. Books written for children differ very little in subject from books for adults. They include the same topics, but they are written in simple language, easy for the child to understand. They can therefore be made to fall into the same classification groups, but since they are to be used by an entirely different class of readers, they must be set apart. If these books are not put in a separate room they should receive a symbol by which they may be distinguished from the books written for adults and by which they may be placed on separate shelves parallel in arrangement to the general collection.

b. Books for the blind. Books in embossed type for the blind are of use to only a very definite class of readers. They can be classified by the same system as that used for the general book collection, but are better shelved apart from the print books.

c. Books for other groups. Here we will consider books adapted for the use of special professional groups, or for certain persons, as women, foreigners, etc.

A work on mathematics for architects will illustrate the first type. Here the author treats his subject with a special group of readers in mind, limiting the treatment of mathematics to the needs of the architect. This very limit will tend to take the book out of the mathematics group and shelve with other books on architecture. If a subject is limited to its special application, its use shifts from the main subject to its application because, as in this example, the whole subject cannot be treated in the book which is prepared for one type of reader. The architect, for example, will find in this book the essential mathematical material for use in his own profession, but it would not satisfy the mathematician who has no special interest in architecture. The same reasoning may be followed in classifying such a book as *Architecture as a profession for women.* Here the subject of architecture is not definitely covered; the topic treated is woman's adaptability to a certain kind of work, and the aptitude she must possess to follow this profession. The volume must, there-

fore, take its place with others treating of vocations for women.

8. **Summary.** The result of this type study has revealed (1) that books lend themselves to subject arrangement; (2) that even a small group, like architecture, may have at least six major subdivisions; (3) that these subdivisions can be again divided into smaller groups; (4) that certain rules can be formulated for arranging books so that like kinds will fall together; and (5) that related books can be classed in close proximity.

The student has, through this study of one small topic, doubtless become conscious of what it would mean if the librarian were forced to work out, without any definite guide, a plan for the arrangement of books in a library covering all fields of knowledge. Such a colossal task would discourage many from attempting to fathom the subject of book arrangement, or classification. Fortunately this is not necessary; such schemes have already been prepared and it only remains for the student to study a definite system of classification and learn how to apply it to his own needs.

III. The Classification Schedule

The next step in getting books on to the shelves is to find some way of marking them so that (1) they will automatically fall into their proper places, (2) the logical order of subjects will be preserved, and (3) individual books may be located. Since both the convenience in designating the topics and in arranging the books on a topic together on the shelves depends upon the symbol, this latter must be a part of some definite schedule of classification.

1. **Definition.** A definite system of classification is a printed schedule which maps out the field of knowledge. Main classes are followed by subdivisions of these classes, and the gradation of subjects is so arranged that specific subjects grow out of general subjects.

2. **Notation.** The symbol which stands for a subject in a definite scheme is called the notation of that scheme, or, as Sayers has defined it, "A book-notation then is a shorthand

sign standing for the name of a term and forming a convenient means of reference to the arrangement of our classification."[1]

Notation is an important *addition* to any classification schedule; it has in no way determined its logic, its scope, or its sequence of development. It only furnishes a convenient reference to the arrangement of a classification; the symbol is not assigned until after the schedule has been worked out. It has no more bearing on the preparation of the logic of a classification outline than the chapter numbers of a book have had in fixing the themes of those chapters.

In most book-classifications the symbol, or notation, stands for either the subject of the book, the topic, or the style of writing, and it is by means of this connotation in the symbol that knowledge classification is made practical for library use. Since the notation is a sign translation of the classification, it usually insures, when it is added to the backs of the books, a book arrangement which repeats the order of the schedule. The notation furnishes also a means by which a classification schedule may be filled in with book titles so perfectly blended that the shelves furnish a logical exposition of the knowledge contained in the whole book collection.

Pure notation. The notation is called pure if one consistent kind of symbol, such as figures alone or letters alone, is used.

Mixed notation. The notation is called mixed if two or more kinds of symbols are used.

Flexible notation. Notation is flexible when it expands with the classification. Since books must be inserted between other books the symbol for marking them must be on a sliding scale. A decimal notation is a flexible notation.

3. Limitations of a schedule. Any printed classification schedule will have its limitations. A schedule made twenty years ago does not provide a place for classifying many of the books of today. New premises have been found for arriving at results, and new discoveries and inventions have changed the point of view of writers. Since authors do not follow any set classification it is impossible for all books to

[1] Sayers, W. C. B. Manual of classification. Grafton, 1926, p. 87.

fit into a fixed frame. Libraries contain the old and the new; they show, through books, subjects in all their changes. What was true at one epoch may be proved false in another; subjects shift from one field of knowledge to another. Take, for example, the subject of aeronautics. Only a few years ago it was a pure science and all its experiments were limited to the domain of physics; but today it takes its place as an applied science. Not only must it have a major place in the applied science group, but a new subdivision must be made in the transportation group for books about traveling by air, a subject hardly thought of when the first American system of classification was prepared.

Special changes create new uses for books, and a different method of approach demands a different grouping of subjects. Books are now written for Boy Scouts combining ethics with sports, and handwork with ideals. This is a new blending of subjects which makes the classifier think, and yet no maker of a classification system could foresee such a problem.

Mr. Dewey, the genius who created the first American plan of classification to receive any universal recognition, said in 1876:

> "Long study of the subject makes it clear that a classification satisfactory in *theory* is, in the nature of things, an impossibility, and a scheme can be satisfactory in *use* only to those who realize those inherent difficulties and are satisfied because of their knowledge that a plan free from annoying difficulties is wholly unattainable."[1]

In approaching a classification scheme, one must keep this fact in mind and not expect the impossible. The uninitiated frequently feel that they can improve a classification by changing certain group arrangements, making additions here or canceling there, but such hopeful aspirants should be discouraged. A distorted system is quite as bad, or worse, than no system at all. One change made in a plan where logic is the basic principle may throw the whole scheme into disorder. If, on the other hand, the plan provides for expansion (and

[1] Dewey, Melvil. The Amherst classification. Library Journal 3:231, August, 1878.

any good system will be built with this as one of its important features), the *skilled classifier* can add new subjects to their proper divisions and keep the system up to date. To do this requires not only a knowledge of subjects but a conception of some of the underlying principles of classification as well. To build an entirely *new* system for the classification of books is quite out of the question, unless one be a Bacon, a Spencer, or a Dewey. It is also a very expensive and tedious task to change from one classification to another, and the service to the readers will inevitably suffer during such a process. In fact, the change is so serious that few librarians have either the money or the courage to attempt it. It is therefore incumbent on every new library, even the smallest, to give much consideration to the system to be adopted. A small library today may be a large one tomorrow, and the classification base must be broad enough to allow for the growth of generations. It is always possible to begin with large groups, as we saw in arranging the architecture group, and subdivide as the collection increases in size, but the *foundation* of any plan must be one which will require as few changes as possible with the growth of the library.

4. Working with a schedule. A classification schedule will spread out before one the entire field of human knowledge; it will map it out with such clarity that one may see subjects in their relative values; it will show the extent of subjects, their varying aspects, their interrelation, their sequence and their gradation; it will offer innumerable suggestions when one is studying subjects and their relationships. But it is the classifier who must grasp the final intent of the author of each book and give to each its proper location in the classification schedule or outline.

It is in this matching of book and schedule that one is led into all kinds of dangers. Such a schedule functions only after the classifier has determined the *subject* of the book. Therefore the classifier must work from the book to the classification system and not from the classification schedule to the book. The schedule will aid the classifier, but it cannot classify the book.

5. Value of the schedule to staff and readers. A knowledge of the classification schedule is not necessary to the classifier alone, but to all who work with books. Since its order is the order of the books on the shelves no one can effectively use the books unless he knows how to use this key.

It opens up a great vista by which the librarian can survey his book resources. He can see the possibilities for the development of his book collection, the balance to be kept, and the weakness and strength of certain classes. He will be reminded of gaps which need to be filled and of overcrowded classes which need to be weeded. He will discover, through a study of a definite classification system, a means of thinking in terms of order and system.

A classification schedule has real value to others than those who serve in a library, in furnishing facts, suggestions, and subject outlines, and in helping to classify information. The student who is preparing a theme, or even a thesis, may often find his subject blocked out in the classification schedule. Reference questions covering many subjects can be answered by this tool. For example, it shows the trend of literature of various countries and lists important writers under each literary epoch. From the history schedule one can get a chronological outline of the history of each country, with dates and a list of important events. A student wanting an outline of the principal events in the Civil war, for example, will find an excellent outline under the U. S. History group in the Decimal classification, and the Library of Congress scheme for History is a compendium of exact information as given in its schedule.

6. Qualifications of a classifier. Dr. Richardson, in addressing the New York State Library School, spoke of classification as "the highest function of the librarian's work, calling into play every faculty and every attainment of knowledge —the acme of bibliographical work."[1] To such bibliographical work the student must bring a logical mind, an unusual mental equipment, a taste for research, and a respect for system. He must have a certain mental curiosity which will

[1] Richardson, E. C. Classification. Scribner, 1912, p. 43.

lead him to analyze and to relate subjects and to run down topics so that they may fit correctly into a logical place in his classification scheme. There must be an understanding of the needs of the reader and a judgment which will maintain a balance between what the reader wants and what he can have.

A knowledge of foreign languages is necessary, especially if one is working with a book collection in a large public or university library. There one must be able to ferret out subjects treated in foreign books and encyclopedias to determine just how a German, for example, would explain a certain new term in a German treatise. English definitions might be so far from the mark that foreign encyclopedias would have to be brought into service.

7. Points stressed in a classification system. A summary of the points the classification system should stress may be stated in this way:

(1) It should be systematic, proceeding from the general to the special

(2) It should be as complete as possible, that is, cover the entire field of a subject

(3) It should be sufficiently detailed to represent the ideas of all degrees of generality

(4) It should allow for the combination of ideas and for classifying from several points of view

(5) It should be logical, that is, show a sequence of ideas

(6) It should be explicit, but concise

(7) It should furnish a notation easy to write and to remember, which shall serve as a symbol for the books and determine their arrangement on the shelves

(8) It should be expansive and flexible in both plan and notation

(9) It should furnish a class for *general* books, and also provide for books treating subjects in any class, or divisions of classes in a general way

(10) It should have an alphabetic index to facilitate its use

(11) It should be printed in a form which will give one a quick survey of the field covered by the system

References

American Library Association. Special problems in classification. In its Survey of libraries in the United States. A.L.A., 1926–1927, v. 4, p. 18–56.
To be read and discussed, not to be accepted as criteria.

Bradford, S. C. The logical principles of classification. Library World 30:227–29. April, 1928.

Jevons, W. S. Classification and abstraction. In his Elementary lessons in logic. Macmillan, 1870 (reprinted many times), p. 276–86.

Maire, Albert. Des systèmes bibliographiques. In his Manuel pratique du bibliothécaire. 1896, p. 18–249.
Somewhat advanced for American students. Valuable bibliographical footnotes.

Merrill, W. S. Code for classifiers. A.L.A., 1928.
A valuable tool for the student and the classifier. This is a new edition of one issued in mimeographed form (not now available) in 1914. The two differ in arrangement.

——— A code for classifiers. Library Journal 37:245–51, 304–10, May–June, 1912.
A series of articles on the principles of classification. Contains some material not in the book listed above with the same title.

Richardson, E. C. Classification. Scribner, 1912.
A theoretical and a historical treatise.

Sayers, W. C. B. Manual of classification for librarians and bibliographers. Grafton, (Wilson), 1928.
Read p. 21–61; 72–110.

Thought Questions

1. Summarize, in the form of rules for classifying, the points covered by the type study in this chapter.
2. Explain why in an unclassified library books would have to be classified every time a reader wanted to use them.
3. What is the advantage of classification in an open shelf room?
4. What is the advantage of having general books arranged before books treating of specific topics of the same subject?
5. Think of some book you have read recently and explain under how many and what subjects it would be valuable to the reader.
6. What is the advantage of having children's books segregated from those for adults?
7. Would your policy be to adopt a close or broad classification for a small library? Explain.
8. Show the divisions and subdivisions of any one of the following subjects, arranging them to show gradation of subjects. Do not consult a definite system of classification, but use any general books or bibliographies on these subjects:

City planning
Labor
Sports

Chapter IV

The Decimal Classification

I. The System
   1. Growth and acceptance
   2. Plan
   3. Notation
   4. Relativ index
   5. Application of books in architecture
   6. Variations in some of the main classes
      a. General works
      b. Philology
      c. Literature
   7. Points to observe in the schedule

II. Editions of the Decimal Classification
   1. Full edition
   2. Abridged edition
   3. Institut International de Bibliographie

III. Second Summary Table

The Decimal classification system will be considered as a whole and its use explained. No attempt will be made to point out the weakness and strength of individual classes; each one of these can be studied in detail, but the textbook for such study should be the Decimal classification schedule. The introduction as printed in the schedule is a full and detailed explanation of the system and its various uses. This will be confusing to the beginner if read *in toto;* therefore certain definite references are made to it at the end of this chapter under the heading "Readings for this chapter." This exhaustive introduction makes any minute description here unnecessary.

Two classes (Philology 400 and Literature 800) will be considered because they, with History 900, do not follow the same arrangement as that laid down for the other classes. History has been outlined in Chapter XX and Biography is very satisfactorily explained in Merrill's *Code for classifiers.*[1]

[1] Merrill, W. S. Code for classifiers. A.L.A., 1928.

I. The System

1. Growth and acceptance. Melvil Dewey, the author of the Decimal classification, was a student at Amherst College in 1873 when he conceived the idea of building a classification scheme for the arrangement of subjects as contained in books. The first edition of his Decimal classification was printed in 1876 with a total of 42 pages in an edition of 1000 copies. The system since 1876 has been extended and perfected by many editions, and, aided by a great number of specialists in the various sciences, has been increased by adding many new subjects. The sixth edition, issued in 1899, had grown to 612 pages, and the latest edition (the 12th) printed in 1927 is a volume of 1243 pages.

The original ten classes into which the Decimal system divides all knowledge were included in the first edition and have been retained without deviation. There were 100 divisions and 1000 sections in this edition, in contrast to more than 40,000 in the latest edition.

The system was quickly accepted and is now in use in the majority of public libraries in the United States, in some of the large reference libraries, notably the John Crerar Library in Chicago, and in many university libraries. It has also been adopted in many foreign countries where translations have been made. The *A.L.A. Bulletin* (1926) estimated that its use extended to 14,000 libraries. The American Library Association has adopted it for its *Booklist,* and for classifying the books in the A.L.A. catalogs.

One of the earliest book catalogs to appear bearing the Decimal notation was that of the public library of Milwaukee, printed in 1885–86. This was a good example of the use of the classification as a basis for a classified catalog. A modern catalog of this type also following the Decimal classification (except in 600 where the Brussels expansion is used) is the classified catalog of the Carnegie Library of Pittsburgh, 1895–1916, 11 volumes, printed in 1907–26. This book catalog is suggestive to the classifier not only because it contains modern titles and Decimal classification numbers, but because

titles are annotated. Annotations are a valuable aid in explaining the contents of a book and serve to justify its classification.

2. **Plan.** A copy of the latest edition (12th–1927) of the classification schedule should be before the student to elucidate this explanation. Before beginning to use the book, however, the use of simplified spelling should be noted.

a. Tables. The system is made graphic by a series of tables used to show the step by step development of classes from the general to the more specific subject.

The first table gives the ten large classes into which all knowledge has been divided. These are:

General works	000
Philosophy	100
Religion	200
Sociology	300
Philology	400
Pure science	500
Useful arts. Applied science	600
Fine arts	700
Literature. Belles-lettres	800
History. Biography	900

The second summary table[1] gives the ten "divisions" into which each of the first ten classes has been divided. The third summary tables, ten in number, give the "sections" into which the ten divisions have been divided. Next are the complete tables, including all the classes, divisions, sections, and subsections. The subjects in the first table form the base for the whole scheme. Therefore any book must belong in one of these groups, but it may ultimately be located in a very minute division of that group.

Subdivisions of the main subject follow the form divisions under the most general class. These are given in groups of tens and are again subdivided into ten more minute groups when the subject demands such treatment. It may be demonstrated thus:

[1] See reproduction of the ten divisions of each class, p. 84 of this text.

Fine arts
Architecture
Architectural construction
Doors
Wooden doors

By this method of showing the sequence of subjects one may proceed from the general, through all degrees of generality, to the most specific subject in that group and not lose the continuity of subjects or miss any of the intermediate grades.

Provision is made for general and special subjects. *General works* are provided for in each class, division, section, and subsection if necessary. This means that a group book, one treating of three or more subdivisions of a subject finds a place; e.g., a book treating of arithmetic, algebra, and geometry would be classed as (510) Mathematics, but should another book treat of Geometry alone it would be a general book covering that subject and class in (513) Geometry. A book on Conic sections, which is a division of Geometry, would class in 513.2. This is again a general work because the subject can be divided into Ellipse, Hyperbola, and Parabola. Books in these three latter divisions, belonging to subjects impossible of subdivisions, may be called specific.

b. Form divisions are provided for segregating the books of one class, or even those of a division of a class. Nine divisions, usually called form divisions, are common to all classes and many divisions. These vary only as the subject may necessitate a different application. Since these form numbers recur under the various classes they are here defined and their use explained by examples:

Theory 01

An exposition of the subject treated from the theoretical, philosophical, or psychological point of view, as C. H. Coffin has done in his book, *Art for art's sake.*

Compends. Manuals 02

A subject treated briefly, or in outline only, as *Epitome of ancient, medieval and modern history,* comp. by Carl Ploetz, which takes the number 902.

Dictionaries. Encyclopedias 03

The subject treated in brief, through definitions, or more broadly in a panoramic style, is illustrated by *Dictionary of architecture,* comp. by Russell Sturgis, and others.

Essays. Lectures 04

A book in which the subject is treated in detached chapters rather than as a continuous treatise, as John Ruskin's *Lectures on architecture and painting.*

Periodicals 05

A serial publication in which the subject is treated in detached articles. *The Architectural Record* will illustrate this (720.5). Periodicals not limited to subject, class in 050, as *Atlantic Monthly.*

Societies 06

One will class here the official publications of societies, such as reports and proceedings, as *Transactions* of the Royal Institute of British Architects (720.6). General learned societies class in 060.

Education. Study. Teaching 07

Books on how to study and how to teach the subject—that is, methods of studying and teaching—as Waldstein's *Study of art in universities.* Textbooks do not classify here, but with the general class, or as 02. See 530.2.

Polygraphy. Collections 08

Books very miscellaneous in style and treatment, or collected works of an author when it is desirable to keep these together. This form number has been interpreted to include also special collections in some of the classes; e.g., 708 is used for Art Galleries and Museums, and 608 has been used for Patents.

History 09

Books in which the history of the subject is told, as Ditcher's *History of architecture.* This form number can be divided geographically, and is used not only for history of a subject but for the local consideration of a subject, even when descriptive rather than historical.

c. Study subjects included under classes. In learning the first ten classes into which Dewey divides all knowledge, the student has in his mind the class in which every book must be located, but this is only the beginning; the ramifications come later when the system spreads out into innumerable lines testing one's ability to follow the intricacies of the subdivisions, and keep the main thread of the step by step pro-

cedure from the classes through the divisions, subdivisions, and sections.

Adjusting a book to a classification scheme means that both the book and the classification schedule must be thoroughly understood; therefore each class must be studied not only as a means of getting at the arrangement, but also that one may know the subjects which have been included under certain classes and divisions, so that when a book is to be classified the student has some conception of the group which may include it. The technique of the system must not blind one to the importance of the mastery of subjects.

3. Notation. Arabic figures are used as symbols, giving a pure notation. The numbers used decimally grow with the gradation of subjects, therefore the notation is flexible. When the name of a subject is indented in the schedule, the number usually increases; therefore, if a library using this system classifies its books broadly, the symbol on the books will be comparatively short, while if the close classification is used, some symbols will be long.

Example:

700 . . . . . Fine arts
720 . . . . . Architecture
721 . . . . . Architectural construction
721.8 . . . . . Doors
721.81 . . . . . Wooden doors

In classifying broadly the generalizing should not be carried back to affect meaning of third figure of class number; e.g., if a library has only a few books on Architecture they should not for that reason be placed in a single group *720*, but should be distributed under *721*, *722*, *723*, etc., according to their contents. These numbers are no longer than *720* and have a more specific meaning; also when a collection grows to the point of needing subdivision this can be accomplished by merely adding figures to *721*, *722*, etc., whereas if these books were numbered *720* the third figure would need to be changed.

It is an important feature that a small library can classify broadly, using short numbers, and as the library grows can

classify more and more closely by merely adding figures taken from the full tables; also a library can classify broadly, with short numbers, for subjects on which it has few books, and can classify more closely to such degree as desired, for any subject on which it has enough books to make closer classification advisable.

The notation is as simple as can be expected. Figures are easy to write and to remember. They have a universal meaning and therefore do not limit the classification scheme to the use of any one language or nationality. Words in an index in German, French, Italian, or any other language refer to the same number and the subject is quickly located:

Example:

Atmospheric electricity	537.4
Electricité atmosphérique	537.4
Luftelektrizität	537.4

The arrangement of numbers on the shelves is strictly by the decimal system. The filing is digit by digit, not by whole numbers; for example, 721 and all its decimals precede 722 and all its decimals, and so on.

Example:

720
721
721.1
721.2
721.27
721.3
722
722.1
723

It will be noted that zero has its normal value. Thus a book number 720 is class 7, division 2, but no section; i.e., treats of division 72 in general, and is limited to no section.

a. Memory features or Mnemonics. The memory feature in the notation adds an asset to the system. Each of the 10 digits, as these are used to designate the 10 main classes, appears as first figure for the number of its own class, and a person interested in Fine Arts, for example, soon learns that all the material on that subject has the number 700 or

some decimal of 7. He can therefore go directly to his large class on the shelves as soon as he knows the first figure for that class. After memorizing the first figure of each class it is easy to memorize the second figure and the person who wishes books on Architecture and knows that all books in this division are shelved under 72 (followed by one or more figures) can immediately find the books relating to that subject.

Sayers, in his *Introduction to library classification,*[1] defines the mnemonic characteristic as "the use of symbols in such manner that they have a more or less constant meaning when applied anywhere in the scheme." While this mnemonic feature appears in many classes of D. C.[2] it is specially useful in Philology and Literature and with History numbers.

With *History numbers* the mnemonic feature consists chiefly in the use of the country number under many other classes to indicate that certain topics can be locally subdivided, i.e., that number for a particular country (the figures following the 9 meaning History) can be added to subject number to show that the book thus classed deals with the subject as existing in that country; 973 United States history (9 being the History number and 73 indicating United States).

027.473 = Public libraries in the U. S.
027.773 = College libraries in the U. S.

These local subdivisions can always be added to the form number 09, indicating history or local treatment of a subject. For a partial list of topics not covered by form division but which may be locally subdivided, see D. C., ed. 12, p. 1229–31.

A further discussion of the subject may be found in Introduction to D. C., p. 19–20. This feature of mnemonics should be noted in connection with each one of the ten classes.

b. Analyzing numbers. As each digit stands for a class, a division, a section, etc., each number can be analyzed after it is chosen to prove its accuracy. For example, the number for wooden doors is 721.81 and may be analyzed thus:

[1] Sayers, W. C. B. Introduction to library classification. Wilson, 1922, p. 76.
[2] D. C. will frequently be used for Decimal classification.

Class	700	= Fine arts
Division	20	= Architecture
Section	1	= Architectural construction
Subsection	.8	= Doors
Subsection	1	= Wooden doors
	721.81	= Wooden doors as applied in architecture

If by an error in copying the student should write this number to read 721.71 and should then analyze it, he would find:

700	= Fine arts
20	= Architecture
1	= Architectural construction
.7	= Ceilings
1	= Wood
721.71	= Wood ceilings

By this method of analysis the error would be caught the moment the fourth number is reached and one detects that 7 indicates ceilings.

A mistake made in copying numbers is a very serious error because it means that all books, records, and catalog cards will bear the incorrect mark, and, what is far more serious, the book will probably be lost in a class to which it bears no relation. To put a book on doors with books on ceilings will heap criticism on the head of the classifier and seem to the reader who goes to the shelves to display an unpardonable ignorance. This habit of analyzing the number after it is copied will save the classifier from many an embarrassing blunder.

4. Relativ index. There will be naturally many subjects which cannot be quickly located in the tables, since it is impossible to know their logical place in the scheme. To obviate this difficulty, an alphabetical index to the tables has been added.

This index attempts to include all topics found in the complete tables together with many corresponding synonyms. It does not include names of countries, towns, animals, plants, etc., except when mentioned in the tables. The reference is not to a definite page but to class number.

This index is relative in the sense that each phase of a subject is noted. If the topic appears in different groups the number it takes in each group is given. The following will illustrate:

Drugs	615.1
adulteration of	614.35
analytical chemistry	543.4
economic botany	581.63
intoxicating, ethics	178.8
hygiene	613.8
Druids	299.16
Drum, musical instrument	789.1
boiler, steam eng.	621.1845

The search for a number may be made deductively through the complete tables by passing from the general to the particular, or inductively by going direct to the alphabetical index. The deductive method is usually more sure though more laborious and time consuming.

The use of this index is not limited to locating topics in the tables; it has equal value in locating topics on the shelves, and is in fact the reader's key to the shelf arrangement in every library where the Dewey system is used. If a reader wishes to study the adulteration of drugs, for example, he looks up this topic in the index, where he finds the number 614.35. He then has only to go to the shelves where the books marked with this number are to be found.

5. Application of books in architecture. Having taken a rapid survey of the plan of this system, it will be interesting to go back to the tables and see how the architectural books which were grouped without any specific system in mind will fit into the Decimal classification.

a. General works. In the large class, 700, which is Fine Arts, architecture is one of the ten main divisions, and to it the number 720 has been assigned. This number has been reserved for general books. Our next question is to locate the architectural dictionaries and other *Form* books.

b. Form divisions. The note under the general heading *Architecture* introduces nine subdivisions providing for the

arrangement of books according to form of treatment, and the architectural dictionary takes the number 720.3.

c. Subjects divided by locality. Can the book, *Historical monuments of France,* be made to shelve with other histories of architecture in France? The phrase "divided geographically like 940–999" found after the form number .9 under 720 gives us this opportunity.

Taking the number 720.9 we find that the 9 meaning History is already a part of the number, and by adding 44 (France) we have 720.944, which is History of architecture in France.

d. Architectural details. The second architectural group we called architectural details because the books treated of the details which go to make up a building. Books covering this subject must be classified either in 721 (Architectural construction), or 729 (Architectural design and decoration). If we peruse the section, 721, called Architectural construction, we find our books in accord with the topics included here. A subsection is given to books on doors, gates, grilles, and windows. This number is 721.8. This has again been subdivided to provide for wooden doors, 721.81; metallic doors, 721.82, etc.

e. Styles of architecture. The third group, Styles of architecture, is treated in Dewey under three sections: 722, Ancient and Oriental architecture; 723, Medieval, Christian, Mohammedan; and 724, Modern. By this arrangement the books on style will be arranged first by period and second by style. Should the library have a book treating of several different styles of these three periods, it should probably take the number 722. This is an exception to the rule, which can be generally followed, of classing a book treating of subjects included in two or three of the divisions or subsections of the D. C. in the number for the large group embracing these subjects.

f. Special classes of buildings. These make up our fourth group of books. Dewey has included classes of buildings under four divisions with the numbers 725, 726, 727, and 728. These have again been subdivided, making it possible to

classify more closely if desirable. It will be interesting to find class numbers for the books mentioned in the previous chapter which belong to this group.

Municipal architecture in Boston, by E. M. Wheelwright, will take the number 725.1. This number is satisfactory only in part. If the library wishes to have all books on municipal architecture together, regardless of city, the number is quite correct, but if there is a need to keep all the municipal buildings of Boston, Chicago, or New York grouped by these cities, the number does not answer the demand. The large library would probably want to subdivide by place (725.1097446), but the average and small library would certainly not think of using so long a number.

Healthy hospitals: observations on some points connected with hospital construction, by Sir Douglas S. Galton, takes the number 725.5. Hospitals are considered here architecturally as a subdivision of public buildings. Management and government of a hospital would be classed in 362. Consult the Relativ Index under the word *Hospitals* to see the various phases of this subject.

Cathedrals and churches of northern Italy, by T. F. Bumpus, takes the number 726, and proves to be a good example of the difficulty of trying to classify a book from its title. In this case should one want to separate church architecture from cathedral architecture, it would be necessary to examine the book carefully. As a matter of fact, only the large libraries would find it necessary to divide the books on ecclesiastical and religious architecture by types. The average library would use 726 for all such books, since the group will be comparatively small.

The book on the Woolworth building would take the number 725.23 if a close classification is followed. No provision is made for locating the building; it is classed by type only. If it is desirable to class this book with others descriptive of New York City, take 917.471. This number is made by inserting the figure 1 (one) after the initial 9 in the History number. (See note in D. C. after 914–919 in the complete schedule.)

g. Miscellaneous books. Here we encounter limitations which are to be met in any classification scheme. *Architecture among the poets* can be classed only with the *general* books on architecture, or in 720.8. A possible alternative is to classify with collections of English poetry, 821.08.

Mathematics for architects goes in the general number unless we stretch a point and give it the form number for manuals, 720.2.

Architecture as a profession for women will class in 396.5, or, following the note under this number, we may class more closely and use 396.572. When a number ending in zero is added to another number, the zero is always dropped; thus, instead of 396.5720, we use 396.572.

6. Variations in some of the main classes.

a. General works—000. General works provide for books too general to be limited to any one of the other nine classes. Some subjects such as Library economy (020), Museums (060), Journalism (070), and Book rarities (090) are included along with places for many *form* books.

It will be noted as one studies each class that many of the forms given here as major topics become more specific form divisions under definite subjects. The first zero used here in the notation means: not limited to any class. Students of library science will be interested in following the subdivisions given under 010 Bibliography and 020 Library economy. These furnish a comprehensive outline of the subjects included in these two fields of study.

b. Philology—400. Philology is the study of language as a science, therefore this class has nothing to do with the language in which books are written; it is limited to the practical study of language.

As in other classes of the D. C. the form divisions are used under the main class and also under English language 420 to be applied to all languages.

Under the first main division (410) we find the subdivisions common to all languages; these first apply to the general question which in this case is the comparative and historical study of all languages. Following this, provision is

made for dividing various languages by the same topics, namely: Orthography, Etymology, Dictionaries, Synonyms, Grammar, Prosody, Dialect, Texts for learning the language. This allows one to find books comparative of all languages (410) together on the shelves followed by the study of various languages in particular, classed in 420–499. One will quickly observe that the second figure in the language number is the same as the country numbers in history.

English language is the only division worked out in full; all other languages are similarly subdivided, but the classifier must turn back to the 420 group for the adjustment of the notation; e.g., in classing a German grammar the 5 must be borrowed from the English language number 425 to make the number 435 for German grammar.

The mnemonic feature here is in the constant use of the same number to express subject under language, i.e.,

425 = English grammar
435 = German "
445 = French "
455 = Italian "

School books—428. This may need more explanation since the main caption is somewhat broad. The second, "Texts for learning the language," is the better heading. While texts for learning the language class here, some libraries may want to make an exception and class these with the books on education in 370. Normal schools might find this more convenient. The note under 428 "For other works see literature of the language 820" refers to books concerned with the philological study of the writings of a definite writer. Such books include the consideration of an author's editions, translations, the interpretations of his texts and like subjects. Edwin A. Abbott's *Shakespearian grammar* is an illustration of a book bearing on language study which would classify in Literature (822.33). Most libraries would prefer to class such books in Literature rather than in 428.8.

As the languages included between 490–499 are used further to expand the Literature (800) class they should be carefully noted.

c. Literature—800. The class designated as Literature considers literature in its restricted sense, that is, limited to belles-lettres.

Merrill's *Code for classifiers* states the limitations of the class in this way:

> "As a general rule, a work of prose whatever its claims to literary style, if it can be classed under a specific topic, has no place in literature. This restricts the class literature to (1) literary criticism, (2) literary history and biography, and (3) works of the imagination under the various literary forms—fiction, poetry, prose, etc."[1]

The Decimal classification provides for these two distinct types of material: (1) Books about literature and (2) Books of literature. In the first group the subject is paramount, but in the second group the author is the important characteristic. Both of these types require a primary arrangement by language or nationality.

Books about literature. Books, the subject of which is general literature, that is, literature not limited by language, as English, French, etc., are classed in 800–809 where the usual form divisions determine the second grouping. These same form divisions may be used under any language, as 820.9 History of English literature, 830.7 Study and teaching of German literature. Probably the most used of these form divisions are Collections 8 and History 9.

Collections. Books which class as collections are not *subject* books, but are the compilations of the works of several authors. Thus a book *of* literature is classed with one *about* literature, since it falls between 7 Study and teaching and 9 History. The groups under 808 should be carefully studied.

History and criticism. Both criticism and history of literature class in 9. Criticisms of an individual author class with his works, e.g., a criticism of Tennyson would class where his poetry is classed. The special use of book numbers for criticism is covered in Chapter VI.

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[1] Merrill, W. S. Code for classifiers. A.L.A., 1928, p. 77.

A cross-section of the class may be described by an illustration.

Essays will be used:

804 = Essays about literature in general. e.g. Matthews, Brander. Historical novel and other essays. (Essays are about literature.)
808.4 = On the technique of essay writing. e.g. Foerster, Norman. Outlines and summaries; a handbook for the analysis of expository essays.
808.84 = Collection of essays taken from various literatures. e.g. World's best essays, ed. by D. J. Brewer.
820.4 = Essays about English literature. e.g. Harrison, Frederic. Studies in early Victorian literature.
824 = An essay; or essays not limited to any subject, written by an English author. e.g. Carlyle, Thomas. Critical and miscellaneous essays.

820.4 and 824 may be used similarly for any language. It may be well to repeat here that essays contributing to a definite subject are classed in that subject.

Individual authors. The D. C. provides for a period division under forms of literature, and within these periods a place is assigned to the most prominent authors of that time.

The most common modification made by libraries using the D. C. is to disregard the period divisions and arrange the works of individual authors alphabetically under each form of literature. This gives the following main groupings:

Languages
Forms of literature
Authors (individual works)

Nationality of the author. Since nationality is the keynote of this class, it follows that the classifier must know the nationality of an author before he can classify that author's works. This often means searching in biographical dictionaries, book reviews, and other reference books.

Another modification frequently adopted by public libraries is the filing of American and English literature together. 810 and its subdivisions may be disregarded entirely, or 810 may be kept only to include works *about* American literature.

Fiction. In fiction we find again books about this form of literature as well as the novels themselves. The great major-

ity of libraries arrange *American and English fiction* alphabetically by author combined in one file without class number. If this is done the number 823 can be used for books *about* American and English fiction.

In some public libraries *fiction printed in foreign languages* is given a class number which shelves it with the literature of that language. For example, German fiction is classed in 833 and is arranged alphabetically by author; French fiction is classed in 843, Italian in 853. Fiction translated into a foreign language is classed with the literature into which it is translated. For example, a copy of Robinson Crusoe printed in French would class with the other French fiction in 843. Other libraries prefer to use a language symbol in place of the class number, as F for French, and thus reserve the class number 843 for books *about* fiction.

Foreign fiction translated into English is usually shelved in a public library with other fiction in the English language. A translation of Dumas into English, for example, would take its place with English fiction. This may seem illogical, but here again it is use which makes such an arrangement desirable. The English reader does not want to be deprived of reading good translations, and will want to find them along with the other English books. The catalog will, of course, contain an author card for each book no matter in what language it is written. By this means the reader can see just what translations of a definite author are in the library. In other words, the catalog supplements the classification in this case.

University libraries usually shelve all editions of fiction together, arranged under the original language. All copies of Dumas would be classed in 843 no matter what might be the language of the text.

Literature (*non-fiction*). In general it is most useful to have the translations of all non-fiction literature stand with the original work. This scheme brings all editions of the same work together, regardless of the language of the text. To accomplish this the book number must always be taken from the name of the author of the original work. An excep-

tion is made to this plan if the class number already stands for that author. For example, in the case of 883.1 the class number means Homer. Here a special scheme may be used rather than duplicate the classification in the book number.[1]

Books for foreigners. Public libraries buying books for the use of the foreign born may want to keep these volumes together by language. This can be done in either of three ways (1) by choosing the broad language number (as 491.7 Russian) regardless of subject; (2) by using the literature number instead of the language number (as 891.7 for Russian); (3) by classifying under subject just as other books are classified, but prefixing a letter designating the language before the class number, as Y540 for a general chemistry written in Yiddish. If capital letters have already been used as prefixes, or if it is desirable to have all these books together, the letter L meaning Language can be used, followed by the initial of the language as LY=Yiddish. These are then shelved apart from other books.

Literature of minor languages—890. Subdivisions for languages which are termed minor are to be used for dividing these literatures but the notation must be borrowed from Philology (400) and adjusted. The 8 for literature takes the place of the first 4 in Philology. This literature number can then be divided by 1 Poetry; 2 Drama; 3 Fiction, etc.

Table for literatures. A great aid in building the literature numbers is the alphabetical list of literatures with corresponding class numbers. See Table 5 in the Decimal classification, Ed. 12.

7. Points to observe in the schedule. The following are some of the points to be observed when using the Decimal classification:

1. Its printed form
2. Indention of the headings in the complete tables
3. The use and meaning of bold-face and light-face type
4. Index to the introduction printed on p. 65-67
5. The introduction—(do not try to read it all at one time)
6. The table of contents on p. 5-8
7. Absence of page numbers except for the introductory pages and the index pages

[1] See chapter VI for book numbers.

8. Third summary tables
9. Use of Form divisions under various classes, as illustrated by first nine divisions under 300 and note under 720
10. Full expansion of a subject. See 069 Museums; and 267.3 Young Men's Christian Association
11. Use of "see also" reference, as illustrated under 301
12. Use of note "Divide like the classification," as illustrated by 330.19
13. Note about language dictionaries under 423
14. English language used as model for division of other languages, see note with 430-489
15. Use of phrase "Preferably classed," as illustrated under 533.8
16. Note under 576, "Class undergoing revision."
17. "Summary" printed at the head of many main divisions, as illustrated under 620
18. Use of the note "Divide like 930-999" as illustrated under 320.9
19. Note under 914 describing geographic number and how to build it
20. Use of the note "Divide like 940-999" as illustrated under 314-319
21. Geographical division of subjects as illustrated under 581.91
22. Repetition in the main divisions in the tables of three or four subject words which appear again in the subdivisions, as illustrated under 624 and 624.9
23. Note indicating a subdivision like another division, as illustrated under 641.6
24. Note under 658
25. 708 as an exception to the usual *form* class
26. Last part of note under 780
27. Note at the beginning of the literature class 800
28. Inclusion of names of writers, with dates of birth and death, in the literature class 811-888
29. Full notes given under Spanish literature 860
30. Note under 890
31. Division of history by both period and geographical divisions
32. Note under 920 biography. All notes under 920 and its subdivisions are very important
33. 940.3 as the number for European war
34. Notes used in history class, as illustrated under 971.4 and 977.8
35. "How to use the index" on leaf before p. 761
36. Notes at the bottom of each page of the Relativ index
37. Geographic table on p. 1229
38. Form division table on p. 1232
39. Language table on p. 1232
40. Philological division table on p. 1235
41. Literature table on p. 1237
42. Biscoe time numbers on p. 1239-40
43. Olin book numbers on p. 1240
44. Special author tables for book numbers for Shakespeare, Spenser, Milton, on p. 1242

II. Editions of the Decimal Classification[1]

The following editions of the Decimal classification have been published. No list is included here of translations nor of the many expansions of individual classes which have been printed by institutions and individuals.[2]

1. Full edition. Dewey, Melvil. Decimal classification and relativ index, ed. 12, rev. and enl., Forest Press, Lake Placid, 1927. This is the edition here described. Eleven other editions have been issued covering the years 1876–1927, each after the first showing expansion.

2. Abridged edition. Dewey, Melvil. Abridged classification and relativ index, abridged ed., rev. and enl., Forest Press, Lake Placid Club, 1921. This edition is useful for libraries of less than 10,000 volumes. Any small library can adopt this shorter notation at the beginning and change to the full class numbers by adding extra figures when the library has reached a size requiring subdivision. This has been reviewed by Mary L. Sutliff in *Library Journal,* August, 1921.[3]

3. Institut International de Bibliographie. Classification décimale universelle. Edition complète, Brussels, 1927–28 (Publication no. 151). The first edition of this appeared in 1905, but has long been out of print. This new edition, now (1929) in process of publication, is being prepared by the Institut with the cooperation of the Nederlandsch Instuut von Documentatie (La Haye). Two volumes are already available and a third will complete the work.

The Institut International de Bibliographie at Brussels adopted the Decimal classification in 1895, for the purpose of classifying its universal subject bibliography kept on cards. As this was to include subject cards for articles, as well as books in all languages on all subjects, the system naturally

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[1] For complete list of American editions see Decimal classification, Ed. 12, 1927, p. 11.

[2] See references at the end of this chapter under Bacon.

[3] Sutliff, M. L. The new abridged Decimal classification. Library Journal 46:649–50. August, 1921.

III. Second Summary Table

Divisions

000	General Works Prolegomena	500	Pure Science
010	Bibliografy	510	Mathematics
020	Library economy	520	Astronomy
030	General cyclopedias	530	Physics
040	General collected essays	540	Chemistry
050	General periodicals	550	Geology
060	General societies Museums	560	Paleontology
070	Journalism Newspapers	570	Biology Ethnology
080	Polygrafy Special libraries	580	Botany
090	Book rarities	590	Zoology
100	Filosofy	600	Useful Arts Applied Science
110	Metaphysics	610	Medicin
120	Special metaphysical topics	620	Engineering
130	Mind and body	630	Agriculture
140	Filosofic systems	640	Domestic economy
150	Psychology	650	Communication Business
160	Logic Dialectics	660	Chemic technology
170	Ethics	670	Manufactures
180	Ancient filosofers	680	Mechanic trades
190	Modern filosofers	690	Bilding
200	Religion	700	Fine Arts
210	Natural theology	710	Landscape gardening
220	Bible	720	Architecture
230	Doctrinal Dogmatics Theology	730	Sculpture
240	Devotional Practical	740	Drawing Decoration Design
250	Homiletic Pastoral Parochial	750	Painting
260	Church Institutions Work	760	Engraving
270	General hist. of the church	770	Fotografy
280	Christian churches and sects	780	Music
290	Nonchristian religions	790	Amusements
300	Social Sciences Sociology	800	Literature Belles-lettres
310	Statistics	810	American
320	Political science	820	English
330	Economics Political economy	830	German
340	Law	840	French
350	Administration	850	Italian
360	Associations and institutions	860	Spanish
370	Education	870	Latin
380	Commerce Communication	880	Greek
390	Customs Costumes Folklore	890	Other languages
400	Filology	900	History
410	Comparativ	910	Geografy and travels
420	English	920	Biografy
430	German	930	Ancient History
440	French	940	Europe
450	Italian	950	Asia
460	Spanish	960	Africa
470	Latin	970	North America
480	Greek	980	South America
490	Other languages	990	Oceania and polar regions

Modern

proved inadequate in certain classes. To adapt the classification to this work Mr. Dewey granted permission to the Institut to expand and print the tables. In this French edition the basic numbers have generally been retained without changes in meaning. The main changes are in more minute divisions in already existing classes, in a new device for using symbols to express the interrelation of subjects, and in the greatly increased numbering capacity. The symbols used in this expansion are explained on pages 40 to 43 of the 12th edition of the *Decimal classification.*

The French edition, often called the *Brussels classification,* will furnish a valuable guide for those libraries now using the D. C. but which are finding it necessary to expand.

The Engineering Societies Library in New York is the only library in America classified after this Brussels plan. In that library broad classification was used for the shelves while a very close classification was adopted for the classified card catalog.

References

Note: The literature on the subject of classification is so extensive that selection is difficult. Therefore, "Bibliographies" are listed here, referring to all phases of the subject, for those who wish to go into the question more minutely. These are followed by definite references relative to this chapter.

Bibliographies

Bacon, Corinne. Classification. (Manual of library economy) A.L.A., 1925, p. 29–37.

Cannons, H. G. T. Bibliography of library economy. A.L.A., 1927, Section O, p. 432–51.

Richardson, E. C. Classification. Scribner, 1912, p. 46–50.
Covers literature, referring to definite schemes.

Sayers, W. C. B. Canons of classification. Grafton (Wilson), 1915–16.
Bibliographies at the end of each chapter.

———An introduction to library classification. Grafton (Wilson), 1922, p. 249–52.

———Manual of classification for librarians and bibliographers. Grafton (Wilson), 1926, p. 321–38.

Readings for This Chapter

American Library Association. Classification. In its Survey of libraries in the United States. A.L.A., 1926–27, v. 4, p. 7–57.
Practice in some American libraries. To be read and discussed rather than accepted as criteria by those without experience.

———"Literature" in libraries. In its Survey of libraries in the United States. A.L.A., 1927, v. 3, p. 13–15.

Bacon, Corinne. Classification. Rev. A.L.A., 1925.
A small pamphlet covering the main classification systems in brief. Gives some rules for classifying. Somewhat too inclusive for students.

———Some adaptations and expansions of the Dewey Decimal classification. In her Classification. A.L.A., 1925, p. 34–36.
Not a complete list. See also Cannons' Bibliography of library economy "Dewey Modified." A.L.A., 1927, p. 438–39.

Brown, Zaidee. Standard catalog for high school libraries. Wilson, 1926. Pt. 1: A classified list with notes, a guide in selection.
The Dewey classification as adapted to the needs of the high school library can be gained by a study of classes in this book in which the Decimal system has been used. Changes have been suggested which better meet the needs of this special type of library.

Collar, M. A. The classification and cataloging of children's books. In Sawyer, H. P. The library and its contents. Wilson, 1925, p. 267–76.

Craver, H. W. Classification—The "Brussels" scheme briefly explained. In Engineering Societies Library. Annual report, 1919, p. 14–19.

Dana, J. C. Classifying and cataloging books. In his A library primer. Library Bureau, 1920, p. 97–117.
A clear statement of what book classification is and what it means in a library, with notes on how to classify. Elementary.

Dewey, Melvil. The Amherst classification. Library Journal 3:231–32. August, 1878.

———Decimal classification and relativ index. Ed. 12, 2 v. in 1. Lake Placid Club, N. Y. Forest Press, 1927. v. 1—tables; v. 2—relativ subject index. Also published in a 2 volume edition.

Read, in the order designated, the following topics in the "Introduction."

1. Origin and growth
   What is the system?
   Explanation of tables
   Sequence of allied subjects
   Decimalism

2. Extent of use
   Notation
   Best known decimal form
   Form distinctions
   Mnemonics

3. Relativ subject index
   What relativ index includes
   Catchtitle
   Minute classing
   Relativ location
   Sizes on shelves

4. Variations practicable
   Bibliographic modifications
   Other uses, etc.

———Decimal classification beginnings. Library Journal 45:151–54. February 15, 1920.

GJELSNESS, R. H. Reclassification; its problems and technique. Library Journal 53:597–600. July, 1928.

HOPWOOD, H. V. Dewey expanded (the Brussels edition). Library Journal 32:362–67. August, 1907. Also in Library Association Record 9:307–22, 1907.
Probably the best brief account in English.

HUTCHINS, MARGARET, and others. Classification. In their Guide to the use of libraries. Wilson, 1929, p. 11–21.
A simple explanation for one unfamiliar with classification.

PENFIELD, H. E. The classifier in a large library. Library Journal 53:655–56. August, 1928.

SAYERS, W. C. B. The decimal classification—with criticism and bibliography. In his Canons of classification. Grafton, 1915–16, p. 98–126.
A good explanation for the beginner. References are to English books and periodicals.

———An introduction to library classification . . . and a short course in practical classification. 2d ed. rev. Grafton (Wilson), 1922.

———Manual of classification for librarians and bibliographers. Grafton (Wilson), 1926. "Brussels" classification, p. 143–54; Decimal classification, p. 135–42; Rules for classifying books, p. 223–30.

THOUGHT QUESTIONS

1. How does the index to the *A.L.A. catalog 1926* differ from the Relativ index to the Decimal classification?
2. Where would you group aviation books written before the first successful flight was made?
3. Would you class books descriptive of automobile tours with automobiles? Why?

4. How many and what phases are there to the transportation question?
5. Would you class bird flight in the same group with human flight? Why?
6. Is education a sociological question in your mind?
7. What is the difference between a general and a special periodical? Give example.
8. Why is it necessary always to have a place in the classification system for *general* books?
9. Explain what kind of books you would classify in Child study (136.7) and in Educational psychology (370.15).
10. Where would you expect to classify books about Boy Scouts' organizations? Explain your choice.
11. Formulate definitions for "Pure science" and "Useful arts" which will show the difference in these two classes as used in this classification schedule.
12. Into what general class would you put a book called *How to beautify the college campus?*
13. What is the difference between chemistry and chemical technology?
14. What is the difference between the following books from the viewpoint of classification:
    a. How to write poetry
    b. A collection of poems by ten different authors
    c. Poems about birds
    d. Complete works of Tennyson
    e. Miles Standish, by Longfellow
15. Is there a difference between the following terms, and should books on these subjects stand together? Explain.
    a. Position of women
    b. Woman's suffrage
    c. Education of women
16. What is the difference between a book on Spanish architecture and one on the architecture of Spain?
17. What are the auxiliary subjects of history?
18. What is the difference between a book *of* music and one *about* music?
19. Assign D. C. numbers to the following:
    a. A book of Danish verse, comp. by Oluf Friis
    b. A book of lullabies, comp. by Elva S. Smith
    c. Laughing Anne [and] One day more; two plays by Joseph Conrad
    d. Critical studies of the works of Charles Dickens, by George Gissing
    e. A study of the modern drama, by B. H. Clark
    f. Twenty-five short plays; international, ed. by Frank Shay
    g. Punch and Judy and other essays, by Maurice Baring
20. How many of the "points stressed in a classification system" given in Chap. III does the Decimal classification meet?

Chapter V

Cutter Expansive and Library of Congress Classification Systems

Part One: Expansive Classification

I. Explanation of the System
   1. The plan
   2. Notation
   3. Indexes

II. Place of the Scheme

Part Two: Library of Congress Classification

I. Introduction

II. Explanation of the System
   1. The plan
   2. The schedules
   3. Editions
   4. Indexes

III. Aids in the Use of the Classification
   1. Symbols on L. C. catalog cards
   2. Catalog cards or proof sheet entries
   3. Printed bibliographies and catalogs

IV. Use of the Library of Congress Classification by Libraries
   1. Reports from libraries using the scheme

V. Government Recognition Insures the Classification

The two American systems of classification printed later than the Dewey Decimal system—the Expansive system of C. A. Cutter, and the system worked out by the Library of Congress and used for classifying the great collection of that library—will furnish the subject of this chapter. The student should know the Decimal classification rather thoroughly before beginning the study of another system, and unless he has already acquired such knowledge, he may find it desirable to postpone the reading of this chapter.

Since the Cutter Expansive system preceded the Library of Congress scheme and was the plan on which much of that classification was based, it will be described briefly first.

Part One: Expansive Classification of C. A. Cutter

Many critics have considered this classification the most scholarly of any of the book classifications. It was the result of the arrangement of the collection of 170,000 volumes of the Boston Athenaeum, of which institution Mr. Cutter was the librarian, and it began to appear in print in 1891. The death of the author left the work incomplete but fortunately some classes under way were edited and published later by W. P. Cutter who also added some new material. Many of the best features of this scheme have been incorporated in that of the Library of Congress. Its interest to the student lies in the facts that (1) it can be used as a basis for developing certain classes not adequate in some of the systems now in use, and (2) from the historical point of view the scheme cannot go unrecognized. It was conceived by a scholar and a librarian whose work has done much to put library science on a high plane. It has been used in developing later classifications and must therefore take its place as a real contribution to library literature, even though it is incomplete.

I. Explanation of the System

While a full study of the scheme is left to the advanced student, the beginner should have some conception of the plan before taking up the study of the classification schedule of the Library of Congress.

1. The plan. There were to be seven tables of classification of progressive fulness, designed to meet the needs of a library at successive stages of growth. The first table is one of few classes and no subdivisions, and is for the use of a very small library. The scheme is developed by gradually increasing the number of classes and sub-classes, and bringing additional letters into the notation. The seventh table was to contain the full tables necessary to classify a very large collection. It was from this adaptation to growth that the system received the title "Expansive."

The base of the plan is twenty-six large classes, each divided into twenty-six parts, with further subdivisions into smaller groups, giving a total capacity of more than 18,000

class numbers. With the large base of twenty-six classes, there is chance for almost indefinite expansion by the addition of new divisions within the classes.

Mr. Cutter tells us that:

> "The expansive classification follows the evolutionary idea throughout, in natural history putting the parts of each subject in the order which that theory assigns to their appearance in creation. Its science proceeds from the molecular to the molar, from number and space, through matter and force, to matter and life; its botany going up from cryptogams to phanerogams; its zoology from the protozoa to the primates, ending with anthropology. The book arts follow the history of the book from its production (by authorship, writing, printing, and binding), through its distribution (by publishing and bookselling), to its storage and use in libraries public and private, ending with its description, that is, bibliography, suitably divided into general, national, subject, and selective. Economics, too, have a natural order—population, production, distribution of the things produced, distribution of the returns, property, consumption. Fine arts are grouped into the arts of solid—the landscape gardening, architecture, sculpture, casting; and the arts of the plane—painting, engraving, etc.; and the mixed arts, being the smaller decorative and semi-industrial arts.
>
> "Similar examples of logical, or, if you please, natural arrangement, are: Putting Bible between Judaism—to which the first part, the Old Testament, belongs—and Christianity, whose sacred book forms the second part; putting Church history between Christian theology and history; putting statistics between geography and economics, since it might have gone in either; putting music between the recreative arts and the fine arts. There are many such transitions, parts of them, at least, novel in classification. They are not merely ingenuities pleasing only to their contriver; they have a certain practical value, since they bring books together which one may wish to use at the same time."[1]

[1] International library conference, London, 1897. Transactions and proceedings, p. 86–87.

The classification is designed not as a classification of knowledge, but of books, but the author says "I believe . . . that the maker of a scheme for book arrangement is most likely to produce a work of permanent value if he keeps always before his mind a classification of knowledge."

2. Notation. Letters are used for all subjects, and it should be noted that when a small library wishes to pass from one of the six classifications to the next larger a change in marking will have to be made. The main classes are represented by capital letters, and subdivisions by small capitals added to the letters of the main classes, for example, F—History: Fv—Heraldry. No figures are introduced to designate a subdivision of subjects, but a special feature of the scheme is the use of figures for countries. A geographical table called the *Local list* is printed apart from the main classification. The figures in this *Local list* may be added to any letter combination, main class letters or subdivisions, to express the local relations of any subject. For example, 45 is England wherever it occurs; by adding this number to Fv (Heraldry) we have Fv45, which is Heraldry of England. The local notation is a very useful and simple method for designating a geographical symbol, and because figures are used only for place and form while letters are reserved for subjects, a distinctive and excellent mnemonic feature is given to the scheme. The *Local list* may also be used to group together all phases of a country by using the number first and affixing the letters standing for subjects, as 45F—English history; 45W—English art. The same list is used to designate literature and literary history of a country, Y and Zy standing for these subjects. By adding the number 35 (Italy) we have Y35, Italian literature, or Zy35, history of Italian literature.

3. Indexes. An index for the first six classifications was printed in one alphabet. Each part of the seventh classification which was completed was equipped with its own index.

II. Place of the Scheme

It is impossible to place this scheme in the field of practical bibliography, because of its incompleteness; it has been used

too infrequently to test it justly. In libraries where it has been in use we find people always ready to affirm that it is an excellent system, but one much hampered by the fact that it has not been brought up to date.

Part Two: Library of Congress Classification

I. Introduction

Since this scheme of classification has been evolved in the actual work of classifying and reclassifying the books in the national library of the United States, it may be expedient to review briefly the history of that library, in order to show what led to the necessity of reorganization, and what influences were rife at the time reclassification was undertaken.

The Library of Congress was founded in 1800; the arrangement of its 964 volumes and 9 maps was by size. All folios were arranged together, as well as all quartos, octavos, and duodecimos. This system remained in vogue until 1812, when the library owned 3,076 volumes and 53 maps. Two years later, in 1814, the Capitol, which housed the library, was burned and the collection was almost completely destroyed. In 1815 the Thomas Jefferson library came into the possession of Congress and the classification used by Jefferson was adopted. This was an adaptation of Francis Bacon's well-known scheme for the classification of knowledge, and arranged the books into forty-four groups. A catalog of this collection was compiled in which the Jefferson group headings were retained, but the books were arranged alphabetically within the groups. A supplement, following the same arrangement, was issued in 1827.

The classification thus inaugurated was retained with some changes and a good many additions. Changes were supervised by A. R. Spofford, librarian of Congress 1860–1897, who believed the aim of the classifier should not be to establish a logical system but to bring about a convenient arrangement of books. Although he found the Baconian system of classification "a worse than Procrustean bed," he did not abandon it for another of his own making, but simply modi-

fied it. Close classification he avoided altogether, because he believed it involved too complicated a notation. Book numbers he abhorred, and in later years when the new classification was under discussion, on one point was he inexorable: There must be no decimals.

In 1899 Dr. Herbert Putnam became the new Librarian of Congress and his plans included a reorganization of the library.

The Catalog division (1897) assumed charge of the development of a new system of classification under the direction of the chief of the department, J. C. M. Hanson, who, with Charles Martel, began the task of evolving both notation and schedules.

In determining the best scheme to apply to this great library, much preliminary research and comparative study was necessary. The question whether to take an existing scheme or to work out a new one was carefully considered with the result that it was determined to make use of the best of all existing classifications, and to construct from these a scheme broader than any then in print. This was necessary in order to reclassify the collection of more than 2,000,000 books now (1926) grown to over 3,000,000. The plan most closely followed is the Expansive system of C. A. Cutter, but many features of the Brunet, Decimal, and Brussels schemes, as well as others, have been introduced. Many suggestions have also been taken from printed catalogs and bibliographies.

Slowly, and in the face of almost unsurmountable difficulties, a great scheme of classification has been evolved to care for the volumes already in the collection as well as those to be added in the years to come. It was not expected that the system would be used to any extent by other libraries and no consideration was given by its makers to such libraries. However, many libraries have already taken advantage of the printed schedules and are benefiting by the work done by the library for its own collection.

Probably no better opportunity has ever been offered for developing a classification based on the actual handling of books. As books of like kind have been naturally grouped

together, they have determined the headings for the schedules which make up the classification. No attempt has been made to follow a scientific order of subjects except as the subjects are represented in books. Naturally a system based on an American collection emphasizes the history and institutions of the United States from both the historical and political standpoint. This feature, however, does not prevent the use of the scheme in libraries of other countries, because it is always an easy matter to use what is needed and to discard the unused numbers. The expansive feature of the plan makes it perfectly possible for other countries to develop the literature devoted to their own history and institutions after a plan similar to that worked out for such subjects in America.

II. Explanation of the System

1. The plan. The plan of any classification should be described by those who conceived it, but as no member of the Library of Congress staff has yet (1928) printed any extensive or detailed history or description of the scheme, it is possible only to recount the results and by so doing to give some conception, but necessarily an unsatisfactory one, of the schedules as printed. No critical estimate of the system is attempted.

The outline scheme of classes as reprinted and revised in 1926 shows the following *main classes:*

A. General works—Polygraphy
B. Philosophy—Religion
C. History—Auxiliary sciences
   The auxiliary sciences are: History of civilization and culture; Antiquities—Archaeology; Archives, Diplomatics, Seals; Chronology; Numismatics, Epigraphy, Inscriptions; Heraldry; Genealogy; Biography.
D. Universal and old world history
E-F. America
G. Geography—Anthropology
H. Social sciences—Economics—Sociology
J. Political science
K. Law
L. Education
M. Music
N. Fine arts
P. Language and Literature

Q. Science
R. Medicine
S. Agriculture—Plant and animal industry
T. Technology
U. Military science
V. Naval science
Z. Bibliography and Library science

In this outline of twenty-one groups it will be observed that the letters I, O, W, X, and Y have not yet been used, allowing for the development of at least five main classes.

An outline scheme of the classes has been printed separately. This is a pamphlet of twenty-five pages with blank space for notes and can be purchased from the Superintendent of Documents for ten cents. It should be owned by any one studying the classification.

The study of any new classification system will be simplified if it is comparative. The Decimal classification is based on a very definite plan and the same general principles appear in each class throughout the schedules; it is, therefore, a good system to use as a basis for study. Students should be familiar with this classification before attempting to understand that of the Library of Congress. Taking the scheme with the larger base, which is that of the Library of Congress, the student will find it enlightening to apply the Decimal notation to each main class in order to become acquainted with the differences in the main grouping of classes. Such a comparative chart will furnish a very good outline for discussion.

Main classes modulate into one another in the Library of Congress scheme, as well as in other schemes, and related subjects have often been combined in the same group, as Language and Literature; Geography and Anthropology; and Philosophy and Religion. The inability of the reader to pass from one class to another without being conscious of a break in the sequence may be serious in a small book collection. It has, however, little real significance in practical use in a library of over 3,000,000 volumes. It is impossible for one mind to survey the field of *one* class, to saying nothing of scrutinizing the sequence in which classes are arranged and merge one into another.

Each class as well as each division and subdivision in the classes has been developed according to its need as expressed in books and not according to any theory of knowledge. Little provision is made for what some theorist may prophesy or predict, but an expansive notation and many vacant numbers give opportunity for expansions as necessities arise or as books are written.

2. The schedules. The schedules provide for the most minute grouping of subjects. A marking for individual titles is even supplied in the case of special collections of prolific authors. Such examples will be found in class B (Philosophy) and in class P (Literature). Each class is made complete even if certain phases of a subject may preferably be placed in another group. The same topic is often included in several classes, but square brackets are used to show when the entry is secondary. This grouping feature makes the schedules especially useful for special libraries, where it is desirable to focus all phases of a subject in one class. For an example of this feature, see CT and following.

a. Synopses. Each main schedule is preceded by a synopsis corresponding to a table of contents. The main divisions are given with such subdivisions as form the main groupings within the division, and in some of the larger classes, such as D (Universal and old world history), a second synopsis precedes the larger divisions, showing how these are subdivided. The student should begin his study of any specific class by reading the Preface to that class, then the synopsis, and lastly the complete tables. The beginner should choose a small class for his study. JV (Immigration) is a good group because it brings out telling features of the classification.

b. Complete tables. The term "complete tables" is used to designate the main schedules which make up a class. They constitute the main part of the classification.

(*1*) *Forms.* The first grouping of books within a class is by form as follows: Periodicals; Societies; Congresses; Collections; Yearbooks; Dictionaries; Terminology and Nomenclature; Encyclopedic works; Study and teaching; Theory; Method, etc.

These forms may differ as applied in various groups, depending on whether the subject lends itself to such treatment. For example, the form divisions *Terminology* and *Nomenclature* may not be needed in Fine Arts, but are necessary in Philosophy. There are no mnemonic features for forms as in the Dewey system, but provision is made for these subdivisions under all subjects requiring such a grouping.

(*2*) *General works.* Following the forms under each large class are the general works, often divided by date so that the earlier material may be separated from the more recent. The date 1800 is most frequently used as a means of demarcation, but other dates and even centuries are used where such grouping is better adapted to the subject.

Following the general books are those of *special general topics,* which may be again subdivided by form, country, or time. General books lending themselves to geographical treatment are frequently divided by country and even states and cities, either by means of special numbers or by an alphabetical arrangement under one number. Such an arrangement is to be found in NA 53-60 (Architecture). Differentiation is often made between *general* works and *general special.* The latter term is used for books treating of the general subject but having a special bearing; they are noncomprehensive. H. H. Statham's *Architecture among the poets* is an example.

References are generously made in the schedule to related topics and to various phases of the same topic, which may be included in another class. This is illustrated under NA 60 and also under NA 205.

Explanations of certain terms greatly facilitate the use of the scheme. For example of this see N8215 (Literary subjects).

(*3*) *Survey of a class.* One of the most interesting classes in the scheme is that of *Universal and old world history* (*Class D*). The following extract taken from the Preface of that class will serve to show not only the theory which formed the base for formulating this schedule, but also the wisdom needed by the makers of the scheme to develop classes, corre-

late topics, and interject references so that a systematic whole could be evolved.

"The philosophy that underlies the classification of history may be briefly outlined. First stands the most universally inclusive literature, subdivided in the more important countries into periodicals and societies, sources and documents, and the collected writings, such as monographs, essays, lectures, etc., of several and individual authors. Upon this follows a grouping of gazetteers, dictionaries, and guide-books, which leads to the systematic comprehensive treatises comprising both history and description, or works on the topography and geography of a given country. Physical geography, however, is classed in GB.

"Now follow the several components of the foregoing, namely, description and travel, social life and customs (including civilization and culture), antiquities, and ethnography and races. Literature, however, dealing with social conditions from a sociological point of view is classed in HN, that dealing with the theory of civilization in CB, works on the economic situation in HC, those of a strictly anthropological character in GN, and artistic archeology in N.

"Just as a knowledge of the geography of a country is essential to the understanding of its history, so, too, the biographies and memoirs of the men and women who are the chief actors in the daily drama of social, political, and diplomatic life give to history life and warmth, and not infrequently the memoirs of a statesman or court favorite throw more light on an historical situation than do volumes of political theory. Collective biography, accordingly, precedes the general works on the history of a country [See DA531.1], while individual biography, including memoirs, recollections, correspondence, etc., is classed with the particular period or reign during which the person in question was especially prominent [See DA565]. Genealogy, however, is classed in CS. It will be observed that the sequence of subdivisions under collective biography is not uniform for all countries. The final form used, for instance, in DL [See DL44] is an advance over the one first adopted as, for instance, in DD [See DD85, DD100, DD158], but be-

cause of the mass of material involved, it was deemed inexpedient to strive for absolute uniformity at present, particularly as the change is not of essential significance.

"The general works, which in the more important countries are subdivided into those written before 1800 and those since, are as a rule followed by the so-called general special [See DP101 and DP103], which might be termed non-comprehensive, and the minor or pamphlet material of general import. The general literature on the special topics of military, naval, political, and diplomatic history comes next, but the more special material is classed with the pertinent period or reign or event, the treatment varying with the individual country. Works on political and constitutional history are, however, classed in J, international law in JX, and military and naval science in U and V.

"In the general period divisions there is considerable freedom of treatment, depending now on the amount of literature involved and now on the significance of the historical situation. This obtains also in the individual reigns. For instance, biography and memoirs have in some instances been placed immediately after the sources and documents [See DK219]; in others and more generally in the later schemes, at the extreme end of the pertinent reign or period, where, by reason of their magnitude and miscellaneous character, they constitute a better group than immediately preceding systematic treatises.

"At the end of each country division are placed the component provinces and districts, rivers, lakes, mountains, cities, towns, etc. [See DD701-901]. Here is classified everything within the scope of history and description having distinctly local interest. Only when it has a more general bearing does a local event go with the general period or reign, while colonial history as a whole is regularly classed in JV.

"Other details have been incorporated in the index, where it is felt that the average user of the scheme will look for guidance, and which has been constructed from the viewpoint that it is an integral part of the scheme of classification."[1]

[1] U. S. Library of Congress. Classification; class D, 1916, p. 4–5.

The preface cited above may be used as a guide for the study of other main classes. Biography, Bibliography, and the Literature and Language classes can be perused with profit because it is in these groups that some deviations from other well-known systems have been made. It is, of course, desirable to acquire knowledge of *all* classes, but those who do not contemplate classifying the actual books need not attempt a thorough study of the complete schedules.

c. Notation. The notation is mixed, that is, made up of letters and numbers. Capital letters are used singly and in combination to signify subjects. The topics or divisions under these subjects are expressed by Arabic numerals arranged consecutively within a group. For example, Fine arts is N, Architecture is NA, and within both of these groups is a series of numbers beginning with one and running in sequence. Many gaps have been left in the numbering, making it possible to expand by adding whole blocks of unused numbers.

Numbers already used can be expanded by the use of decimals (See DA86). The use of decimals does not mean that the Library of Congress scheme is a decimal system, nor do the decimals always imply sub-arrangement. They are used because no whole number is available at that particular place. .A2, .A3—Z are frequently used to group one phase of a subject immediately before another. For example, under DD156, Houses of Hapsburg and Luxemburg, .A2 stands for Sources and documents, while General works are arranged alphabetically by author under .A3—Z.

d. Special tables and special arrangements under subjects. Special tables contain concrete directions for subdividing a class more minutely than it has already been divided in the general tables. Many of these are definitely devised to cover the one subject to which they apply, and are seldom suitable for any other topic. It is by means of these tables that logical and minute expansion can be accomplished. They appear either at the end of the class or are incorporated in the body of the schedules. A reference is made in the schedules to the tables to be used in each case where special arrangement is desirable.

The beginner will find the use of the special tables difficult, and it is to be regretted that more explicit directions are not printed to elucidate their use. The following interpretation of the tables, accompanied by examples, may help the inexperienced.

(1) Since *subdivision by United States* is more frequent than by other countries, a table covering this country is frequently given in detail in the body of the schedules, and a supplementary table for other countries, to be used if desired, is added at the end of the schedules. An example of this is to be found in the subject Emigration and Immigration (JV).

(2) *Geographical subdivisions* and relations are designated in several ways: by a series of numbers assigned to a place in the regular sequence of numbers; by a decimal number attached to the primary number; or by Cutter numbers used alphabetically.[1]

The minuteness of the geographical division is dependent on the subject to be divided. In some cases the continents alone suffice, or perhaps the nations of the world, while in others it may be necessary to classify down to the most minute geographical division, as is often the case in class D (History). Descriptive books are very closely classed. For example, under DQ (Switzerland) one finds the number 841 assigned to Regions, peaks, etc., with the provision made for dividing this subject again alphabetically by individual peaks by means of the Cutter number added decimally; e.g., Books treating of the Jungfrau (Cutter J8) would be marked DQ841.J8.

Emphasis is often given to one city of a country by assigning a whole block of numbers in the schedule to that city and its subdivisions, while other cities of the same country are covered by including them under one number and dividing alphabetically. For example, the symbol DF has been assigned to Greece, and under this Athens obviously needs special treatment; accordingly the numbers 915–935 are

[1] See the next chapter for an explanation of Cutter numbers.

assigned to Athens, while other cities of Greece are arranged alphabetically under the one number 951. Books about Thebes take the symbol DF951.T3.

Applying the geographical arrangement to general form books, we find an example in AE Modern encyclopedias, where the order is AE71, Asiatic, AE81, African, and AE91, Australian. Another illustration may be cited under AG (Information bureaus); the arrangement gives more space to the United States, grouping all other American bureaus under one number, while Europe is divided alphabetically by place, and other countries are lumped under one number with no sub-arrangement.

Geographical tables in class H (Social sciences). This class has been chosen as an illustration because it contains some "floating" geographical tables which might easily be used to divide subjects not otherwise provided for in the classification. They include: Table of cities of the United States, Table of states, and Table of countries in one alphabet.

The "Table of geographical divisions" on page 523 of class H (1920 edition) may be best explained by analyzing a symbol:

Taking the subject *Labor literature and history (later) for France,* we begin with HD8101-8940, which is the group of numbers assigned for countries other than the United States. Table VIII is indicated. Turning to this we find France has been assigned the twenty numbers beginning with the 321st and going through the 340th. Of the series of numbers 8101-8940, assigned to countries other than the United States, the 321st number through the 340th belong to France; that is, 8421 through 8440. The table of subject subdivisions (p. 112) assigns the 10th number to Labor literature and history (later). The 10th number is 8430. Therefore the number for Labor literature and history (later) for France is HD8430.

(3) *Subject subdivision tables.* An example of such a table is given in class J (Political science) on page 121. We find Table of subject subdivisions under states in JK2700-9501. This table can be applied as follows:

Example: New Hampshire. Constitutional Convention, 1918-19, Convention to revise the Constitution, June 5, 1918.

On page 119 the numbers for New Hampshire are 2901-3000, and the table (p. 121) gives History by period (date of constitution or constitutional treatise) as 25, or the 25th number in the group of numbers 2901 to 3001 which is 2925. Since this publication is issued in the form of a journal, A25, taken from the subdivision of the table, is added. The whole symbol, therefore, becomes

JK = Class
2925 = New Hampshire constitutional history (by period)
.1918 = Date
A25 = Journal

(4) *Form division tables.* One of the most general tables for forms is that on page 47 of class AS (General works: Societies). Here the simple notation is as follows:

.A1	Periodicals
.A2	Yearbooks
.A3	Congresses
.A5	History. Handbooks
.A6	Local
.A7	Directories. Lists
.A8-Z	Individual societies

These symbols may be added to any subdivisions under country in AS to which one number is assigned in the schedules. It will be noted that .A1 through .A7 are used for form divisions and are an integral part of the classification. .A8-.A9 are used for all individual societies which must be "Cuttered" from words beginning with the letter A. The letters B-Z are for societies Cuttered from these letters.

A flexible scheme for form books which can be applied to any class in the classification is outlined by Anna C. Laws, of the Library of Congress, as follows:

> "Under many subjects it is advisable to place certain forms of material at the beginning of the class, and the notation is manipulated to this end. This can be done by means of book numbers, and is perfectly feasible, as the proportion of surnames beginning with A is small. .A1 to .A6 or .A1 to .A8 may always be reserved when

needed, and authors' surnames beginning with that letter find room under .A7 to .A9 or .A9 alone if .A1-.A8 has been set aside for other purposes. As examples of this usage the following cases are selected:

"a) In biography. A man's autobiography precedes his life, written by another person, e.g.

B1606.A2 Mill, John Stuart. . . . Autobiography. 1909.
B1606.C8 Courtney, W. L. Life of John Stuart Mill. 1889.

"b) In geographical divisions or subdivisions where the country, state, or city is the author, e.g.

QE193 =Geology of Quebec
QE193.A6 Quebec (Province) Dept. of lands, etc. Rapport sur la géologie . . . de Chibougamau. 1912.
QE193.A7 Adams, F. D. Report on the geology of the Laurentian area. 1896.

"c) In form classes, galleries, museums, etc., where the institution itself issues publications, e.g.

N1070 =National gallery of London
N1070.A2 London. National gallery . . . Report
N1070.A6 1911 London. National gallery . . . Catalogue British school. 1911
N1070.A7 1906 London. National gallery. An abridged catalogue. Foreign schools. 1906
N1070.A9 Addison, Julia de Wolf. The art of the National gallery. 1906

(A number of entries between .A2 and .A6 are omitted here.)"[1]

In the last series of examples A2, A6, and A7 take the place of the Cutter book numbers for the *form* books. A9 is the Cutter book number taken from Addison. The Addison book is *not* a form book, but a book *about* the National gallery, and is Cuttered from Addison.

Fixed tables may be illustrated by class Z (Subject bibliography), (See Z5001-8000). Three tables to be used with the various subjects are given, the table to be used being indicated by a symbol before the subject.

Bibliography of political and social sciences—*7161-7166. (The asterisk indicates that table A is to be used.)

[1] Laws, A. C. Author notation in the Library of Congress. Govt. Print. Off., 1920, p. 13–14.

General works = 7161
Early works = 7162
Periodicals = 7163
Topics = 7164
Local = 7165
Catalogs = 7166

Special topics, 7164, is divided by subject and a table is given with the Cutter number for each.

Example: Massachusetts. Bureau of statistics. Labor bibliography:—
Z = Class
7164 = Political & Social sciences. Special topics
.L1 is the number given in the table for labor
M4 is the Cutter no. for Massachusetts

A fixed table is also used to subdivide a number of subjects in the B scheme, one of which is Practical and applied ethics, class BJ.

BJ1581-88 = General works, 1900-.* Headings marked with an asterisk may be subdivided according to a table on page 5 in Class B. Example:

BJ Kirchwey, Freda, ed.
1581 Our changing morality. 1924
.K58

1 in the table is the number for English works and K58 is of course the Cutter number for Kirchwey.

"No table should be slavishly followed, but should be amplified or modified as exigencies arise. As books are not screws, turned out by machinery, according to a mathematical formula, but present infinite variety as to form and content, an orderly arrangement requires the constant exercise of ingenuity and common sense. An example illustrating this point may be taken from the Literature schedule (PN-PR-PS-PZ). In Table VIIIa the literary forms of an author's works are placed in the following order: 1. Novels, 2. Essays, 3. Poems, 4. Plays. If an author is pre-eminently a novelist, his novels take precedence. If he is a playwright par excellence, the dramas would take first position and the novels be relegated to fourth place, and so on. If the author has written nothing but poetry, is it necessary merely for the sake of uniformity to crowd all his works into the third section and waste the others?"[1]

[1] Laws, A. C. Author notation in the Library of Congress. Govt. Print. Off., 1920, p. 18.

The best way for the student to become familiar with the tables is to select certain book titles which will illustrate their use, buy the Library of Congress cards for these, and analyze the class numbers as printed on these cards. The following Library of Congress order numbers will furnish the student with printed cards giving examples—

3-1444	17-21830
9-1497	22-11012
12-17232	22-20511
14-18604	25-22065
16-24609	

3. Editions. The schedules thus far completed have been issued in a pamphlet edition. Each main class has been printed separately in size 25½ x 20½ cm, with its own title-page, imprint, and independent paging. The size of the printed schedules varies from sixty-three pages to more than six hundred pages, and the price ranges from ten cents to one dollar (1929). Several classes have already been revised and printed in second and third editions. The schedules, being government documents, are sold by the Superintendent of documents, Washington.

The parts not yet (1929) printed are class K (Law), which has not yet been begun; a small section of class C, namely CN, Epigraphy; and several parts of class P which are in manuscript. These include:

PJ = PL	Modern European languages
PB = PH	Oriental languages and literature
PM	Hyperborean, American, and artificial languages
PQ	Romance literatures
PT	Teutonic literatures

There are certain to be *changes and corrections* in the L. C. classification schedules as the collection at the library grows and the schedules are used, and while such revisions are sometimes disconcerting to the classifier in another library, they assure one that the schedules will be kept to date and that the classification scheme will be a growing rather than a fixed tool. Some libraries have had *photo print copies* of out-of-print and manuscript schedules made to use until such time as the Library of Congress may put them into type. The Library

of Congress is now (1929) supplying slips containing additions and changes in their classification schedules. These are issued monthly and may be had on cards or on gummed paper for pasting.

The library issues a list of its publications which may be obtained gratis from the Superintendent of documents. This list includes all the classification schedules available and should be carefully watched for the announcement of new printings and new editions.

4. Indexes. As each class is completed, an alphabetical index to the class becomes an integral part of the schedule. While this index is relative, (that is, it refers to all aspects of the subject), it does not give all references to the same topic appearing in another main class. It is not possible to give them all as long as the schedules are printed at different times.

The indexes are very full, including geographical entries, also personal names when used as subject, names of battles, and other topics frequently omitted from such lists. References are made from different forms of names and attention is sometimes directed to related subjects, as Bohemia, *see also* Czechoslovak Republic. A sample of the index in the Fine Arts group (N) may be cited: It should be noted that the reference is to class number and not to page.

Religious art:	N7790 = 8190
Architecture:	NA4600 = 6113
Monuments:	NB 1750
Painting:	ND 1430
Prints:	NE 1675, 1712, 1722, 1732
Sculpture:	NB 1910

It is probable that a complete index to the classification will be issued as soon as all schedules have been completed.

a. Indexed by list of subject headings.[1] The printed list of subject headings of the Library of Congress has been made to serve as a satisfactory relative index, but it is naturally limited to those terms which have been used in a dictionary catalog. Many terms in this list cannot be given a reference to the classification because they are too specific. This list

[1] For a description of the list of subject headings see Chap. X.

does locate, however, many more related topics than can be found in the indexes printed with each schedule.

III. Aids in the Use of the Classification

1. Symbols on L. C. catalog cards. As the schedules of classification are completed, the classification symbols for books in the classes covered are added to the printed catalog cards issued and sold by the Library of Congress.[1] At the present time (1929) nearly all the cards except those in Law and a few sub-classes not yet reclassified, contain the Library of Congress class symbols.

While these printed numbers are considered an advantage to classifiers, it has been found that they are not often a deciding factor in determining the adoption of the L. C. classification scheme by libraries. They are simply another advantage of the system, and have proved a great economy to the classifiers and of material assistance in deciding difficult questions.

Many libraries using the L. C. classification will not care to use its elaborate symbols. When changes are made to suit local needs, they must be carefully noted in the schedules.

Assistants using L. C. catalog cards must guard against accepting a symbol which does not fit the local practice, and because of the frequent changes made in the classification the symbol on the L. C. card must be verified before it is used.

2. Catalog cards or proof sheet entries. Probably the greatest aid to the use of the classification scheme would be a file of the printed catalog cards, or entries clipped from L. C. proof sheets, filed by the classification symbol. Such a file would allow the classifier to survey a field of the classification as it has been filled in with books, and would show him how the Library of Congress has interpreted certain classes and formulated certain symbols. It would not only furnish a valuable tool for the classifier, but would also provide an excellent classified catalog of the books in the Library of Congress.

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[1] For a description of these cards see Chap. XV.

In reclassing a large group of books, L. C. cards can be ordered and arranged by their classification symbols. This gives the classifier a much better interpretation of some of the classes than can be gained from one or two titles.

3. Printed bibliographies and catalogs.[1] The *List of American doctoral dissertations* and some of the printed bibliographies and catalogs issued by the Library of Congress contain the Library of Congress classification symbol as a part of each entry.

IV. Use of the Library of Congress Classification by Libraries[2]

Some eighty libraries have (1928) adopted the L. C. classification. These include university, special libraries, and those of government departments. Readers who use these two types of libraries are naturally better accommodated by a scheme which is minute in its subdivisions, up-to-date, and modern. Professors and students generally want their books closely classified, and if the arrangement is one which holds closely to a grouping by subject rather than by form, they are better satisfied, because they can more easily use the library as an auxiliary aid to their own work. University libraries give more weight to the logical arrangement of their books than to the questions of speed in service and ease of access.

The large library will probably find the Library of Congress scheme more satisfactory than will the small library, unless the book collection of the latter is limited to one special field, in which case the Library of Congress classification may be the best yet printed. For example, a special music library would doubtless find the M class (Music) a most satisfactory schedule to adopt. This part of the Library of Congress scheme was worked out by O. G. Sonneck, a specialist in his field. It embodies the results of classifying a representative collection of scores and books about music. Mr. Sonneck

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[1] For a list of these, see U. S. Library of Congress. Publications issued by the library. Govt. Print. Off. (gratis).

[2] For list of libraries now using the classification see Reports of the Librarian of Congress.

says in his preface: "A classifier of fair talent and skill could without much difficulty 'telescope' our scheme into a suitable instrument for any collection of any size, by canceling unnecessary subdivisions, by substituting subdivisions needed for his special purposes, and by rearranging at his convenience the sequence of certain entries." This statement is probably true of many of the classes, but only the student of at least "fair talent" should undertake to make radical changes.

Up to the present time (1928) only three public libraries, that of St. Paul, Minnesota, Enoch Pratt Free Library, Baltimore, and the Grosvenor Library, Buffalo, have used this classification. The St. Paul Public Library chose the L. C. scheme mainly because of the printed catalog cards. The library and its records were destroyed by fire and in order to reorganize as speedily as possible, the library ordered the cards and adopted the L. C. classification. As the cards contained the classification symbols, the new collection was put into working order in record time. This library reports that while satisfied with the L. C. classification in many particulars, it is somewhat hampered by the lack of mnemonic help in the notation and by the elaborate subdivision of subjects, which often results in separating material in one subject, a disadvantage when the collection is not large. This splitting up of material is confusing when one is searching for a particular book.

1. Reports from libraries using the scheme.[1] A study of material collected from twenty-two college libraries, when this book was in process of writing, revealed some very interesting facts about the use of the Library of Congress scheme.

V. Government Recognition Insures the Classification

The fact that this scheme is printed by the government and can be purchased at a comparatively low price brings it within the reach of most libraries and many individuals. With the

[1] A full mimeographed copy of this report may be obtained at the office of the American Library Association, Chicago.

United States government and its national library back of the enterprise we may be reasonably assured that the classification will be kept up to date and that the library and its bibliographic work will be permanent. The names of Herbert Putnam, Librarian, J. C. M. Hanson, the first chief of the catalog division, Charles Martel, the first chief of the classification division (now (1928) chief of the catalog division), and C. W. Perley, the present (1928) chief of the classification division, should be known to every student and every user of the monumental work, for it is to them that the library profession is indebted.

References

CUTTER EXPANSIVE CLASSIFICATION

Cutter, C. A. Expansive classification. Part 1: The first six classifications. Boston. C. A. Cutter, 1891–93. 160p. Part 2: The seventh classification (adapted to libraries of over 150,000 vols.) in sheets (incomplete, 1929).

———The expansive classification. International Library Congress. London, 1898. Transactions, 1898, p. 84–88.
An excellent article, by the author of the scheme.

———Suitability of the expansive classification to college and reference libraries. Library Journal 24:41–49. January, 1899. Also issued as a reprint.

Cutter, W. P. The expansive classification. A.L.A. Bulletin 5:224–27. Papers and Proceedings, July, 1911.
Description of the system with a list of the schedules prepared after the death of the author. Gives some account of plans for the future of the work.

Sayers, W. C. B. The expansive classification. In his Canons of classification. Grafton, 1915–16, p. 67–93.
A description of the system, with a brief select bibliography.

LIBRARY OF CONGRESS CLASSIFICATION

Fellows, Dorkas. Library of Congress classification *vs.* Decimal classification. Library Journal 50:291–95. April 1, 1925.
A defense of the Dewey system written in answer to an article by J. R. Gulledge.

Gulledge, J. R. L. C. *vs.* D. C. for college libraries. Library Journal 49:1026–27, December 1, 1924.
Written to provoke discussion between merits of D. C. and L. C.

Hanson, J. C. M. Library of Congress classification for college libraries. Library Journal 46:151–54. February 15, 1921.

An answer to the question: "Is the Library of Congress classification suitable for college libraries?"

HICKS, F. C. The Library of Congress classification and its printed catalog cards. Library Journal 31:255–56. June, 1906.
Experience of the U. S. Naval War College in adopting the classification.

MARTEL, CHARLES. Library of Congress classification. A.L.A. Bulletin 5:230–32. Papers and Proceedings, July, 1911.
One of the best articles on the subject.

———The Library of Congress classification; some conditions regarding the relation of books or library classification to the "order of the sciences." In Essays offered to Herbert Putnam. Yale University Press, 1929, p. 327–32.

SAYERS, W. C. B. Library of Congress classification. In his Canons of classification. Grafton, 1915–16, p. 127–61.
A good chapter for students. Contains a rather full outline of the schedules. The same chapter has been reprinted in the author's *Manual of classification*. Grafton, 1926.

SMITHER, R. E. Library of Congress classification. Library World 16:130–36, November, 1913.
Includes a history and description of the classification followed by a critical survey of the schedules and the notation.

U. S. Library of Congress. Annual report of the librarian, 1901–date. Washington, Government printing office. 1901–date.
Each year a brief report is made covering the work of classification, including a list of new publications and revisions issued by the Classification division. Libraries using the L. C. classification are listed in this report.

U. S. Library of Congress classification; a review. Library World 18:355–59. June, 1915–16.
A descriptive rather than a critical review. Many schedules have been revised since this was written.

Use of Library of Congress classification. A.L.A. Library Curriculum Study, 1928.
Reports from libraries. Facts collected by Margaret Mann in connection with this text. These mimeographed sheets may be obtained at A.L.A. headquarters.

Chapter VI

Book Numbers and the Shelf-list

I. Book Numbers
1. Definitions
2. Author arrangement under subject
3. Symbols for marking books
4. Cutter numbers
5. Special schemes
6. Special location marks
7. Library of Congress author notation
8. Record of book numbers

II. The Shelf-list
1. Definition
2. Uses
3. Rules for compiling
4. Form of the shelf-list record
5. Number of entries on a card
6. Arrangement of the cards
7. Shelf-list as a substitute for other records
8. Union shelf-list
9. Shelf-list and Want-list

III. Conclusion

I. Book Numbers

Thus far in our study we have traced the books to the shelves where they are grouped by subject. There is yet no secondary arrangement under subject by which an individual book can be identified. It is this secondary arrangement which will be discussed in this chapter, together with the consideration of shelf records.

1. Definitions. Before beginning a discussion of the marking of books so they may be easily located and returned again to the shelves, the student should have in mind the following definitions.

a. Class number. One or more characters showing the class to which a book belongs. In a relative location this number also shows the place of the book on the shelves. (Cutter)[1]

[1](Cutter) will be used as an abbreviation for Cutter, C. A. Rules for a dictionary catalog.

b. Book number. One or more characters used to distinguish an individual book from all others having the same class, subject, or shelf number. (Cutter.)

c. Call number. Characters indicating the location of a book on the shelves and distinguishing it from all others in the library. Usually composed of class and book number, or in fixed location, of shelf and book number. (Cutter.)

Example of use of call number:

The call number at the right will appear on the back of the book if the work is in more than one volume.	820.7 R74 v. 3
The same call number at the right will appear in this form on the catalog and shelf cards. The volume number, omitted here, will appear in the collation on the catalog card; the shelf card will have volume and copy numbers noted after the title.	820.7 R74

2. Author arrangement under subject. For the sake of convenience in locating books and also for the sake of bringing together all the works of one author who has written a number of books on one subject, an alphabetical arrangement of authors is usually adopted under each class or subject. The books are then arranged on the shelves in this order: (1) Subject, (2) Author, (3) Title.

Example:

(1)	(2)	(3)
Education	Dewey, John	Democracy and education
	Dewey, John	School and society
	Herbart, J. F.	Lectures and addresses on education
	Spencer, H.	Education
	Thorndike, E. L.	Education

3. Symbols for marking books. The subject-author arrangement may be accomplished in two different ways, both of which are practically applied in libraries. The first method is to apply the *class symbol only* to the back of the book and to arrange the books secondarily by the name of the author. The second method is to apply the *class number* to the book

and also a symbol taken from the author's name, which, like the classification symbol, insures a definite arrangement under each class. These author symbols are obtained from a table of names which has been worked out for this purpose.

a. Marking with class number only. If the first method of marking is used, that is, applying only the class number to the book, or no number at all to fiction, certain difficulties are at once encountered. The choice of entry is left to the person shelving the books. If the author's name which is to furnish the secondary arrangement does not appear on the back of the book, what name is to be selected from the title-page? If the author has written under two or more names, as did Birmingham, are the books to be arranged under the two names and thus become separated? When two names are mentioned, which name shall be chosen? How shall books be shelved which have no author, that is, anonymous books? These and many other questions will arise in the mind of the person who wishes to replace a book after he has used it, and the assistant whose duty it is to keep the shelves in order will meet the same difficulties. The conclusion is soon reached that in case the author's name is not printed on the back of the book it must be added, that is, written or printed in. If several names are on the back of a book, as often happens, the author's name should be underscored. Otherwise a book is quite as likely to be shelved by its illustrator, translator, or editor as by its author, or even the series may be taken. What will happen if there are several editions of the same book, perhaps with different title-pages? Will these be kept together so that they can be found quickly? A reader may want the *fourth* edition, for example, and will take no other.

If no individual symbol is given to a book, there is no short cut reference to it, and the reader is forced to copy the author and title each time he uses the catalog.

Less difficulty is encountered in shelving *fiction* if no symbol is used than in shelving classed books. The exact order of fiction is not so important; there is less confusion with other names, as editors and illustrators; and readers of fiction do not expect the same exact service. Many public libraries omit

the book number from these books and find the plan very satisfactory. There is, however, some confusion on the part of the reader when he finds no call number on the catalog cards for fiction. All cards, other than fiction, have a symbol by which the reader asks for the books. The words "Copy author and title," or the word "Fiction," stamped where the call number usually appears, might solve the difficulty.

b. Marking with class number and book number. The second method of locating books on the shelves, that of adding a distinctive symbol to each book, may require more work in the catalog department, but it will doubtless save both time and effort at some other point along the line in which the book travels. Time may be saved in getting books ready for the shelves by the first method, but wasted in finding them. The book number gives to the book a fixed place and a shorthand designation which can be used in place of the author and title; less thought is required of the assistant who shelves the books; a mechanical sign is furnished which is sure to place the book in its proper pigeon hole; the work is done once for all because the number is assigned when the book passes through the catalog department. No matter how many times it is handled thereafter, its location cannot be changed even if someone has considered the author to be Gilbert Murray instead of Euripides.

Both of these methods have strong advocates. Some libraries feel that book numbers are altogether superfluous; that while exact order may not always be maintained on the shelves, especially where readers have direct access to the books, this inconvenience is slight compared to the work involved in assigning them. The point is also made that time is saved when the book number is not written on charging slips, catalog cards, and other records.

Those who favor the use of book numbers are convinced that the time saved by the catalog department in not assigning them is more than offset by the hours lost in hunting for books misplaced on the shelves, and by the inconvenience of having no symbol for charging and for other records. The hurried reader who has not time to copy authors and titles and specify

editions, usually appreciates call numbers. He has a far better chance of getting what he asks for.

There is little doubt that the small library (20,000 volumes or less) would find no difficulty in either method, because it would be an easy matter to revise the shelves frequently, and the number of books in any one class would not be great enough to cause confusion even if they were not in exact order. Many of the larger public libraries are not using the book number for fiction but still use it for all non-fiction books. This is a compromise which might be made by those libraries which are anxious to try the no-book-number plan and are not yet wholly convinced of its advantages. Some libraries, after discarding book numbers for non-fiction, found the method unsatisfactory and have gone back to them.

4. Cutter numbers. Cutter book numbers are still too much in vogue to make the study of them unnecessary.

C. A. Cutter, who furnished so many aids to catalogers, worked out the first set of tables for assigning these numbers. The tables provide a combination of abbreviations qualified by numbers which insure an alphabetical order of names. The author's last name is matched with the letter combinations in the tables, the initial letter is retained; the rest of the letters in the name are represented by numbers taken from the table. If we look up the name W. J. Rolfe in the section of the table here reprinted, we find it to be represented by R747, since W. Rolfe will come after M. Rolfe but will precede Roli. Rolleston would be R751, while Romanes would be 758 because it falls between Roman and Romano.

Section from the Cutter-Sanborn 3-figure table:

Rol	—744
Role	—745
Rolf	—746
Rolfe, M.	—747
Roli	—748
Roll	—749
Rolles	—751
Rollo	—755
Roman	—758
Romano	—759

These book number tables, or author tables, as they are frequently called, cover all letters of the alphabet, the vowels and consonants being given in different groups. They are mounted on boards strongly hinged and folded, and have been compiled for both small and large libraries.

The table usually recommended today is the *Cutter-Sanborn 3-figure alphabetic table,* which is an independent scheme, not an enlargement of the Cutter 2-figure table. Full directions for its use are sent with each set of tables. The Cutter 2-figure alphabetic order table is suitable for libraries of less than 5,000 volumes but should not be purchased for libraries larger than this. If, however, the 2-figure table has already been in use in the library and an extension is needed, a Cutter 3-figure table is available which is an enlargement of the 2-figure.

Numbers should be assigned to actual books in order to understand how the symbol is selected. The Cutter numbers have been worked out to meet the following requirements: Simplicity, brevity, and utility, (i.e., capacity to serve some purpose besides that of an arbitrary mark).

a. Length of the number. In using the Cutter-Sanborn 3-figure table, the book number may be shortened by using one letter and two figures in all classes *except fiction and individual biography.* The symbol for W. J. Rolfe then becomes R74 instead of R747. The number of books by authors beginning with the same letter and classifying in exactly the same place are too few to make three figures necessary except in large libraries.

Small libraries, and private libraries, can use a very simple book number. The initial of the author is sometimes enough, but if more is needed a figure or a title letter can be added, e.g.

1. R = the first book by Rolfe in a definite class
   R2 = the second book by Rolfe in the same class
   R3 = the third book by Rolfe, and so on

   or

2. R, Rb, Rc, Rd, and so on

In reference and university libraries the advantages of both brevity and simplicity may be outweighed by the value of a number which gives added information or effects a closer

grouping, and which thus enables the librarian to produce more quickly the books on a special phase of a subject. Therefore, these libraries often use elaborate numbers.

b. Book number dependent on catalog entry. Before using the Cutter author table one should clearly understand that the correct author entry for the book in hand has been determined. No book number can be assigned until the main entry has been chosen, since the author arrangement of books on the shelves is dependent on the same author entry as the one used in the catalog. In other words, the Cutter number must always be taken from the main catalog entry, unless a special exception is made. This means that book numbers will not only be taken from authors' surnames, but also from titles in the case of anonymous books if the author has not been found, periodicals, government departments, societies, institutions, and any other form of main entry.

c. Distinctive call numbers. After the Cutter book number has been chosen it is added to the class number to form the call number. Should the identical call number be already noted in the shelf-list, some variation must be made, since no two call numbers can be exactly alike if each title is to have a distinctive symbol. If there are 75,000 books in the library, all of which differ in subject, title, or edition, there must be 75,000 symbols by which books can be distinguished.

Distinguishing between conflicting call numbers. Different authors having the same surname and classing together, naturally have exactly the same call number. These are distinguished by adding a figure to the Cutter number of one. The alphabetical arrangement may not be exact here if the books do not come into the library at the same time. The number added is not taken from the Cutter table. It is added arbitrarily, but keeping in mind the forename of the author, e.g.

S616 for Sinclair, B. W. Big timber
S6165 for Sinclair, May. The belfry

If there are a great many books by May Sinclair and only one by B. W. Sinclair, the order given above may be reversed.

The same method of distinguishing authors is used when

two names happen to take the same Cutter number in the table.

Title distinctions. Two books written by the same author and falling into the same class are distinguished by adding the first letter of the first word of the title, not an article, to the Cutter book number. Example: Should there be a book by W. J. Rolfe classified also in 820.7 with the title *Principles of teaching English literature,* it would take the call number 820.7 R74p to distinguish it from the same author's *Elementary study of English.* A title letter may *always* be added to Cutter numbers for fiction because of the quantity of books filed in one alphabet.

Books known by more than one title are distinguished by using the title mark of the best known. This will insure all the copies of the same title getting together, e.g.

811 L85h for Longfellow. Song of Hiawatha

Two titles by the same author in the same class beginning with the same letter are distinguished by adding the second letter of the title, e.g.

842 M18m	for Maeterlinck.		Mary Magdalene
842 M18mi	"	"	Miracle of Saint Anthony
842 M18mo	"	"	Monna Vanna

Titles beginning with the same two letters are distinguished by selecting two letters from each title so as to secure alphabetic order, e.g.

P844m	Porter, Eleanor.	Miss Billy
P844mb	"	Miss Billy—married
P844md	"	Miss Billy's decision

d. Numbers for special classes of books.

Editions. It is important that all editions of the same title be kept together, so that they may be used comparatively. These may be marked in various ways. (1) *Use the Cutter number as usual, add to this, first the title letter and second the number of any edition after the first, as,*

625.7 S73t	Spalding, F. P.	Text-book on roads & pavements.	1894.	
625.7 S73t3	"	"	"	Ed. 3, rev. & enl.
625.7 S73t4	"	"	"	Ed. 4, rev. & enl.

If the title letter "t" had not been added when the first book was received, proceed to add an "a" before adding the number of the edition. This will guard against any other title coming between the editions, S73—S73a3—S73a4.

(2) *Use date after the Cutter book number,* as

625.7	625.7	625.7
S73	S73	S73
	1908	1912

This makes a longer call number and for this reason is not so often used by public libraries. The date has a real meaning which is not apparent if the first plan is used. It is used by large libraries, especially in shelving books in science.

Criticism. Commentaries. A criticism or commentary should be shelved with the work to which it refers. In this case the Cutter number is taken from the author of the book criticized, and not from the author of the criticism. For example, the book number for *The moral system of Dante's Inferno* by W. H. V. Reade will be taken from Dante so that this work may stand with other works about Dante's *Inferno.* The call number then becomes 851 D19i. In order to let this book shelve after all the editions of the original work and with other criticism, the letter Y, indicating criticism, is added to the book number, as well as the initial letter of the translator (Reade). The number then becomes 851 D19i.Yr. The same plan and symbol may be applied whenever it is desirable to have a commentary, criticism, or biography follow the original work. If it is desirable to keep dictionaries in another group, Z can be used. A Dante dictionary would be marked 851 D192.Z. Some libraries omit the point before the letters Y and Z, and write D192Z.

Biography. Those libraries adopting an alphabetical arrangement by biographee for *individual biography* will take the Cutter book number from the subject, or biographee, rather than from the author of the book. The object is to bring all the lives of one person together rather than to scatter them under the names of the authors writing about them. All lives of Lincoln must be under L, all of Washington under W,

and so on. These are then arranged secondarily under author by adding the initial of the author, for example:

Charnwood, G. B. B., baron. Abraham Lincoln. L736c
Johnson, W. J. Abraham Lincoln, the Christian. L736j
Mace, W. H. Lincoln the man of the people. L736m
Teillard, D. L. ed. Recollections of Lincoln. L736t

Individual biographies which make a contribution to the *subject* to which a life has been devoted, such as art, music, or philosophy, are frequently considered to be more useful if shelved with that subject. Here again the book number should be taken from the person written about rather than from the author of the book. For example, *George Inness: the man and his art,* by Elliott Daingerfield, would class in 759.1 (Dewey) and in order to keep all the lives of Inness together under this class, the book number is taken from Inness. 759.1 I58d. The *d* is taken from Daingerfield.

A table has been worked out to separate collective biography from individual biography and yet bring the two groups into close relation. This table, called the *Table of Olin numbers,* is printed and explained in the Decimal classification, Ed. 12, 1927, p. 1240-1241.

Translations. If the public library using Dewey is not subdividing its literature by periods, but is keeping, for example, all Greek poetry together, some provision must be made for assembling the translations of one title by language. This may be done by adding a letter designating the language after the Cutter book number, as:

Homer. Iliad, tr. by Pope=883 H76iEp
" Ilias; übersetzt von Voss=883 H76iGv
" L'Iliade; tradotta da Monti=833 H76iIm

In the above illustration the E, G, and I added after the Cutter number stand for English, German, and Italian translations respectively, and the small letters following are the initial letters of the translators.

The Library of Congress has a special scheme for indicating translations, which is explained in Laws, A. C. *Author notation in the Library of Congress,* page 9.

5. Special schemes.

a. Dividing the works by a single author when classed in one place. Large collections of works of individual authors grouped under one class number may be arranged according to a special scheme. If an attempt is made to use Cutter numbers for such collections, confusions are sure to arise. In most classification schemes there are assigned, in the Literature class, class numbers which stand for individual authors, and the use of the Cutter numbers from this same name would only be a useless duplication. The following plan reprinted from *Decimal classification,* Ed. 12, page 1242, can be used for dividing such large collections.

Note: The letters given below are used as the first symbol in the book number, as 822.33 = Shakespeare; B = Biography of Shakespeare. Each group can be further subdivided by adding the letter of the author of the book, as
822.33
Br = Life of William Shakespeare by W. J. Rolfe

A-N are common to all authors; O-Z are reserved for individual authors
A Bibliography. Authorship controversies
B Biography
C Biographic collateral
D Higher criticism
E Minor criticism (textual)
F Sources, allusions, learning
G Miscellany; concordances; societies, etc.
H Quotations, tales and plays from, adaptations, condensations, etc.
I Complete works without notes
J Complete works with notes
K Complete works in translations
L Partial collections without notes
M Partial collections with notes
N Partial collections in translations
O-Z Individual works

Special printed schemes for Shakespeare, Spenser, and Milton are to be found in *Decimal classification,* Ed. 12, page 1242-1243.

b. Chronological arrangement. It is often desirable to arrange books chronologically by date of publication, particularly in such cases as science where the reader wants the

latest book. Rare books also lend themselves to such a plan. If the date alone is used in place of the Cutter number to accomplish a chronological arrangement, there is danger of confusion in symbols. To obviate this difficulty and also to shorten the date and to translate it into a symbol similar to the Cutter number, a table has been worked out by W. S. Biscoe called the *Biscoe time numbers.* This scheme is printed in the *Decimal classification,* Ed. 12, page 1239, and should be studied by those who are in need of such an arrangement. W. S. Merrill has also worked out a table for designating date in the book number.[1]

6. Special location marks. Books belonging in a special room or group, or forming a special collection, are designated by a letter prefixed to the call number; e.g., M = Musical scores; J = Juvenile books; R = Reference books.

Symbols are also used to designate the special shelving of a book which, because of its format, cannot stand on the regular octavo shelves; e.g., F prefixed to the class or book number designates the book as a *folio.* This letter immediately tells the assistant in search of the book that it will be shelved in a special section. *Dummies* are used to show when books are shelved out of their regular place. These dummies usually contain the call number, author, and title, and give a reference showing where the book may be found. Another means for identifying books shelved out of order is to keep a card list of them. This is an aid to the assistants, but not so useful to readers. Such a list in sheet form, typed and posted at the end of the cases in the stack or open shelf room, is a better method. A list of dummies should be kept, or note of the irregular location should be made on the shelf-list.

7. Library of Congress author notation. Since the author notation as used at the Library of Congress is printed with the class symbol on its catalog cards, it is necessary to speak briefly of that system here. The Library of Congress often makes a book number or author number an integral part of the class number, as we have noted in studying its classi-

[1] Merrill, W. S. Merrill numbers. Public Libraries 17:127-29. April, 1912.

fication system. Therefore, great importance is attached to the use of this symbol when the L. C. scheme of classification is used.

The Cutter 3-figure table is used by the Library of Congress as a basis in assigning numbers for books in Fiction, and the Cutter-Sanborn 3-figure table for all other classes, but neither is strictly adhered to and there are numerous exceptions. Many tables in the classification scheme serve as general guides in the use of the symbol, but there are almost no precedents for special contingencies.

The Library of Congress always employs a decimal point before the letter of the book number to differentiate the author symbol from the class symbol; e.g., NA7328.G68.

Many modifications are made in the use of book numbers in the Library of Congress, depending upon the size of the collection falling under one group. The author designation is reduced to a minimum if there are only a limited number of books but it may be much extended in another group where the entries are numerous. Often double book numbers are used, but these are usually closely connected with the classification scheme, the first number being used to designate subject within a class, and the second the author. This same plan could be adopted in connection with any classification system wherever it is desirable to arrange a large subject alphabetically by topics or by smaller subdivisions. Taking the Dewey number 663, for example, which is the number for Beverages, an alphabetical scheme could be followed by giving Cutter numbers to Chocolate, Cocoa, Coffee, Soda water, Teas, etc. The same method is suggested under 394.268 in the Decimal classification.

The most common rules and variations used by the Library of Congress are all set forth in a small pamphlet by Anna C. Laws, under the title *Author notation in the Library of Congress.*

8. Record of book numbers. Since every symbol which stands for a book must be distinctive, i.e., stand for an individual book, there must be an accessible key to all such call numbers. This record is to be found in the *shelf-list.*

II. The Shelf-list

1. Definition. The shelf-list is a list of the books as they stand on the shelves. Each book is represented by a card, each card bearing the author, title, edition, number of volumes (if more than one), number of copies (if more than one), the call number of the book, and such other items as the library shall deem necessary. The call number determines the arrangement of the cards in the shelf-list in the same way that it has already determined the arrangement of the books on the shelves.

2. Uses. The shelf-list is a very important record for all departments of the library. It is not generally used by the public, except when parts of it are duplicated to furnish a classified catalog.

The shelf-list serves in the following ways:

a. As a key to the call numbers. Knowing the call number, one can ascertain from the shelf-list the author and title for which that call number stands.

b. As a check against duplicate call numbers. As new call numbers are assigned, the shelf-list record is consulted to see if that call number has already been used.

c. As an aid to the classifier. This list spreads out before one, in a general but logical way, all the subjects represented in the book collection. It is the classification schedule filled in with book titles. The scheme is no longer a skeleton; the pigeon holes into which we fit our books are occupied and there is before us in card form a workable and logical display of the titles.

The classifier has in this list an invaluable tool to aid in insuring uniformity and consistency in his work. By reference to it he can see at a glance just what books have been classified in a given group, how certain subjects are growing, what types of books are being assembled in a certain division, and how the whole is lining up and developing a precedent from which rules for classification may be formulated and policies fixed.

The shelf-list furnishes a guide in bringing together like

books and also shows how closely certain classes have been divided and subdivided. This is the record on which the classifier depends to keep the collection harmonious. It is an easy matter to classify a book on the gold mines of South Africa with other books on *gold* mining today and to classify a like book with general mining a month from today. When quantities of books are being classified, there must be such a record to furnish safety zones where one may pause and survey the road before attempting to cross it; the shelf-list is such an oasis for the classifier.

d. As a classified catalog. This use of the shelf-list is elaborated in Chapter XII where the classified catalog is discussed. The use of analytical entries in the shelf-list is also discussed in the same chapter.

e. As an inventory record. It is customary for libraries to take an account of stock at regular intervals and check each book against some complete list. Entries in the shelf-list being arranged in the same order as the books on the shelves, that record should serve as the stock-taking list. Every copy must be accounted for whether it is in the stack, at the bindery, in the open shelf room, on the reference shelves, on the mending shelves, or charged out to an individual or an agency. As a result of this inventory the library has a thorough revision of its shelves and a clear record of the books missing.

f. As a measuring stick of the book collection. The librarian can, from the shelf-list, survey the whole field of the book collection, know the proportion between the classes represented, see the weakness and strength of certain subjects, and be guided in making additions. If there is a demand for books on the drama, for example, there is great danger of overloading in this group and getting an overstock of volumes which may have only temporary value. By keeping an eye on the shelf-list one can gauge the size and character of the class, and save an overzealous assistant from using too large a share of the budget for works in this class.

g. As a historical and statistical record of the book collection. Since the shelf-card shows the number of copies of each

title, the library may have here a history of every book; the number of copies purchased, the number lost or discarded, the number in the central library, in the branches and other agencies. It also shows what titles have been withdrawn.

h. As an insurance record. The shelf-list is the record most frequently accepted by insurance companies as being the most complete and accurate inventory of the stock of books owned by the library.

i. As furnishing subject bibliographies. Should the library wish to print a list of its books in any one class, or subdivision of a class, the shelf-list furnishes copy for such a list. All cards filed under the number 720 (Dewey) and its decimals, for example, list all the books the library has classified under the subject of architecture. The shelf-list is the only record in the library which gives this logical grouping of titles, unless a classified catalog is maintained.

3. Rules for compiling. The main entry on the shelf-list should with very few exceptions follow exactly that on the catalog card; therefore an exact duplicate or an abridgment of the catalog card furnishes the shelf-card. All rules applying to the choice of main entry for an author catalog apply to the shelf-list, and the shelf-list card should either be made when the book is cataloged, or the catalog card should furnish the copy for this record. The unit card is used very generally as a shelf-card. The best simple rules for making a shelf-list are to be found in Dewey's *Simplified library school rules*, 1898, pages 61–67. This is now out of print, but will be found in many libraries.

Rules for cataloging should be understood before shelf-cards are made.

4. Form of the shelf-list record. The shelf-list has been treated here as a *card* record because that is the usual form. There are, however, some libraries in which a sheet record is used for continuations. There is a convenience in using this loose leaf book form for such collections as well as for depository sets of U. S. documents. Cards do not lend themselves to listing long sets, and a quantity of cards tied together become unwieldy and unsatisfactory. If sheets are

used, enter only one title on a sheet. The card list should be used for all books other than continuations, and this can be tied up with the sheet record by inserting a reference, like the following, in the card file to those publications which are listed on the sheets.

Call No.	London, Edinburgh and Dublin philosophical magazine and journal of science See sheet shelf-list

5. Number of entries on a card. Every title which has a distinctive call number must have its own shelf-card. This means that each edition of a book, even if titles are exactly alike, must have its own shelf-card.

As has already been pointed out, volume numbers and copy numbers are added to the shelf-card, and are not considered as distinguishing marks in a call number, except to designate books belonging together under the same call number.

6. Arrangement of the cards. The shelf-cards should be arranged first by class number and second by book number. Book numbers, like class numbers, are arranged decimally, as M46—M46e—M46g—M462—M465—M465p—M467—M47. If no book numbers are used, the cards are arranged first by author and second by title within each class.

7. Shelf-list as a substitute for other records. In many libraries where the accession book has been discarded, the shelf-list has become a combination record. Items such as cost, source, and date of purchase are added to the shelf-card making this one record answer as a shelf record and order card.[1]

8. Union shelf-list. The discussion of this subject has been taken up in Chapter XIV.

9. Shelf-list and Want-list. A sheet shelf-list of continuations can be made to serve as a "Want-list" as well as a shelf-list by making the complete bibliographical record on

[1] See References appended to this chapter; also Drury, F. K. W. Book selection and acquisition. A.L.A. (In progress)

the shelf-list. Enter here, as the set is cataloged, all the volumes, supplements, indexes, etc., which have ever been issued, and indicate in pencil opposite those not now in the library the word "wanting." By this method the shelf-list is an excellent check to be used in filling in missing parts and volumes.

III. Conclusion

It is impossible in the limits of one chapter to discuss all the special schemes applicable to the sub-arrangement of books under subject on the shelves. Only the most simple use of the Cutter numbers, with a few of the variations needed to adapt them to special cases, has been attempted. Libraries having special collections will find it necessary to work out their own schemes, but it is possible that some of the suggestions noted in this chapter, together with the references appended, may give hints useful in developing such schemes.

The question of the installation of a shelf department in a large library has not been attempted. This subject would require the space of two or three chapters. To understand the problems involved in such an undertaking one should study Chapter XIV treating Added copies and withdrawals.

References

BOOK NUMBERS

Bibliographies

Bacon, Corinne. Book numbers. In her Classification. (Manual of library economy) A.L.A., 1925, p. 36–37.

Cannons, H. G. T. Bibliography of library economy, 1876–1920. A.L.A., 1927, (0144–0155), p. 448–51.

References

American Library Association. Survey of libraries in the United States. A.L.A., 1926–27, v. 4, p. 15–17.

Bacon, Corinne. Classification. (Manual of library economy) A.L.A., 1925, p. 23–29, 37.

Biscoe, W. S. C. Chronological arrangement of books on shelves. Library Journal 10:246–47. September-October, 1885.
A clear explanation of the Biscoe time numbers.

Biscoe time numbers; Olin biography numbers, and special author tables for Shakespeare, Spenser, and Milton. In Dewey, Melvil. Decimal classification, Ed. 12, 1927, p. 1239–1243.

Book numbers. Library Notes 3:419–443, 1893.
The best exposition yet published. Includes definitions, principles, special schemes for public documents, for special authors, and for a chronological arrangement.

Cutter, C. A. How to use Cutter's decimal author table. Library Journal 12:251–52. July, 1887.
By the inventor of the scheme.

———Author-tables for Greek and Latin authors. Library Journal 11:280–89. August-September, 1886.
A plan which can be adapted to any library, since the classics are fixed and no newcomers need be provided for.

———Two-figure alphabetic order table. Library Bureau, 1906.
Suitable for libraries of less than 5000 volumes.

———Three-figure alphabetic order table. Library Bureau, 1902. 2 v.
An enlargement of the two-figure table.

———Alphabetic order table altered and fitted with three figures by Kate E. Sanborn. Library Bureau, 1896.
An independent scheme, not an enlargement of the Cutter two-figure table.

Dana, J. C. Author numbers. In his Library primer. Library Bureau, c1920, p. 123–27.
How to assign simple book numbers and the marking of labels. Elementary.

Dewey, Melvil. Eclectic book-numbers. Library Journal 11:296–301. August-September, 1886.
A full and practical article covering most points about book numbers.

Laws, A. C. Author notation in the Library of Congress. Govt. Print. Off., 1920.

SHELF-LIST

Bibliographies

Cannons, H. G. T. Bibliography of library economy, 1876–1920. A.L.A., 1927, (A144–Q155), p. 448–51.

Rathbone, J. A. Shelf department. (Manual of library economy) A.L.A., 1918, p. 12–13.

References

American Library Association. Survey of libraries in the United States. A.L.A., 1926–27, v. 4, p. 15–17.

———Committee on Library Administration. Statistical report on methods of keeping up shelf-list and withdrawal record. A.L.A. Bulletin 3:211–213. Papers and Proceedings, September, 1909.
Few conclusions are given.

AUSTIN, W. H. Combination order and shelf-list slips. Library Journal 20:49–50. February, 1895.
Models are given and the use of the card is explained.

BAILEY, L. J., The Gary (Indiana) public library shelf record and order card. Bulletin of Bibliography 8:61–62, 1914.
How the combination record was carried out.

CARNEY, F. Problems of a shelf department. Library Journal 33:433–37. November, 1908.
Reference is to a college library. Does not go into methods.

CHICAGO UNIVERSITY. LIBRARY. Rules for shelf-listing. Chicago, 1919.
A brief pamphlet of 9 pages. Limited to the U. of C. library.

CLAPP, C. B. Group index. Library Journal 39:431–35. June, 1914.
Advocates a shelf catalog near the shelves to guide users in an open access stack. From the point of view of the college library.

CRAWFORD, ESTHER. Shelf-list. Public Libraries 4:381–83. October, 1899.
Advantages of a card shelf-list. Good for students.

DANA, J. C. The shelf-list. In his Library primer. Library Bureau, c1920, p. 127–32.
To be read as showing possibilities for making shelf-cards. Not to be followed in all cases.

DEWEY, MELVIL. Simplified shelf-list rules. In his Simplified library school rules. 1898, p. 61–67.
Rules for use of sheets and cards. Models are given.

HUTCHINS, MARGARET, and others. Call numbers and the shelf-list. In their Guide to the use of libraries. Wilson, c1920, p. 18–24.
A simple explanation with good examples.

LIBRARY BUREAU. Library supplies, 1928, p. 9.
Gives cut of extension shelf-card showing method of recording copies. To be used in place of, or with, the order card.

RATHBONE, J. A. Shelf department. (Manual of library economy) A.L.A., 1918.

SAWYER, H. P. comp. The library and its contents. Wilson, 1925, p. 411–27.
Reprinted articles dated 1878, 1899, and 1901 on the shelf-list and the shelf-list versus the accession record.

THOUGHT QUESTIONS

1. Why would it not be satisfactory to arrange books on the shelves under each class, by accession numbers?
2. How much information should a shelf-list provide?
3. Give some reasons why the shelf-list should be kept in a fireproof case or vault.
4. What statistics can be compiled from the shelf-list?
5. What would be the advantage of keeping the juvenile shelf-cards in a separate file from the adult cards?

6. What is the advantage of using standard size cards for the shelf-list?
7. Is it necessary for the users of the library to understand the Cutter book numbers? Why?
8. If no call numbers are used on the books how could statistics be kept of books circulated by classes?
9. Cutter book numbers are less necessary in a small library than in a large library. Explain.
10. Explain how book numbers may be used to bring about a second *subject* arrangement under a class number.

Chapter VII

The Catalog

I. Function and Form of the Catalog
1. Function of the catalog
2. Form of the catalog
3. Card catalog the accepted form
4. Unit card
5. Uniformity of catalog cards

II. Catalog Based on Principles
1. Technique
2. Rules and regulations

III. Catalog Codes
1. A.L.A. rules
2. Official code
3. Other codes and manuals

IV. Bibliography of Catalog Rules

V. Definitions

I. Function and Form of the Catalog

Consideration has been given in previous chapters to the classification of books and to the records pertinent to such classification. Large classes of books have been brought together on the shelves, and each book has been given its place within these classes. The shelf-list record has been covered. It now remains to consider cataloging the books and so furnish a quick way of getting at their authors and their contents. This entails a discussion of catalog entries.

The term "entry" will be used in this chapter to mean all the information which goes on the catalog card. It is the full registration of the book in the catalog.

The catalog, which will be made up of entries, may best be defined by giving its functions.

1. Function of the catalog. It is the function of the catalog (1) To show each work in the library under author, translator, editor, illustrator, commentator, series, or any other person, body, or name under which a reader might

look. (2) To show these author entries as enumerated above so arranged that all the works of one writer will be found together under the same name, making it possible for readers either to find a specific work, or to survey the entire literary output of an author as represented in the library. (3) To show each work in the library, and even parts of a work, under the subjects of which it treats. (4) To show these subject entries so arranged that like subjects will fall together and related topics will be correlated. (5) To show titles of works which need to be entered under title. (6) To show cross-references by which a reader may be guided from one entry to another in the catalog. (7) To show a description of each book by giving imprint, collation, and notes when necessary.

While this is the function of the catalog it does not follow that all catalogs are made in such fulness. The purpose of the library, the needs of readers and staff, and the budget must all be considered when planning any library catalog.

An executive, Dr. Arthur E. Bostwick, has said in this connection:

> "It is clear, I think, that both the methods and results of cataloguing ought not to be immune from modification to adapt them to local peculiarities. Some public libraries are used so much for scholarly or antiquarian research that their catalogues need to approximate that of a university library; others are of so popular a nature that they hardly need a catalogue at all."[1]

With the above specifications in mind, one clearly understands how the catalog will, through these various entries, supplement the classification from many points of view. Where the classification brought books together to reveal the most outstanding subject of each, the catalog can reveal not only one subject, but all the subjects which are treated under one cover, as well as authors, titles, editors, and translators. Unlike the classification which involved the placing of volumes, the catalog will contain merely printed or written registrations.

[1] Bostwick, A. E. Library essays. Wilson, 1920, p. 419.

2. Form of the catalog. The first thing to consider in beginning a catalog is what form it is to take. The two most generally accepted are (a) the card form and (b) the book form. In considering these two styles the following are among the requirements to be taken into account:

(1) A catalog should be flexible, because new entries must be added constantly to the catalog
(2) The catalog should be kept up to date
(3) Like entries should stand together. For example, an entry for a new book by Sir Harry H. Hamilton must be filed with other entries already in the catalog under this name
(4) It should be possible to remove from the catalog entries for withdrawn books
(5) It should be possible to change entries with the development of the book collection. New terms supplement old ones, requiring a readjustment of entries; changes in classification necessitate changes in the call numbers
(6) The catalog should be as accessible as possible
(7) There is a demand for a catalog which can be consulted outside the library, that is, which can be taken home by readers

a. Card form. A catalog in card form is one in which each entry appears on a separate card; in other words, each entry is a unit which can be shifted and sorted into any arrangement. The cards are filed in trays which make up the catalog cabinet. Such a file allows of endless intercalation. It meets most of the needs specified above because:

(1) Cards are flexible units
(2) New entries can be added at any time; therefore the catalog can be kept alive
(3) Like entries can be filed together, since each entry is on a movable unit
(4) Cards can be removed at any time; therefore the catalog can be kept alive by withdrawing the entries for books
(5) Cards can be removed and replaced by changed or new cards; therefore the catalog can be made to keep pace with changes in new terms
(6) A card catalog is accessible within narrow limits, since it can be consulted only in the place where the cards are located. It is not portable except as single trays are portable
(7) As it cannot be taken home, it cannot meet the requirements of number 7 in the first group

b. Book form. A catalog in book form is one in which entries are printed in page form and bound into a volume or volumes. The entries appearing in a card catalog may, at a

stated time, be put into permanent book form. The catalog then becomes a closed record. No new entries can be added unless the whole is reissued, because the entries are not movable units. The fact that it is fixed, and therefore out of date the moment it is off the press, proves that it cannot meet the requirements of numbers one to five in the first group.

The catalog in book form does, however, have many advantages which the card catalog cannot meet. It is portable and can be consulted in any part of the library, and if not of unusual size, it can be taken home to be perused at leisure. It is as easy to handle and to manipulate as any other book. The entries are so grouped that the eye can scan a page quickly, while the difficulty of turning over card after card in a card catalog discourages the reader and leads him to ask his question of the library assistant rather than to help himself. Book catalogs occupy much less space than card catalogs, a question of some importance in large libraries. The cost of printing a catalog in book form is considerable. The meticulous work of setting the copy due to the lack of continuity of matter, makes the work both laborious and painstaking, and brings the cost almost out of reach of the average library. Any librarian hesitates to put so much money into a tool which will be almost immediately out of date.

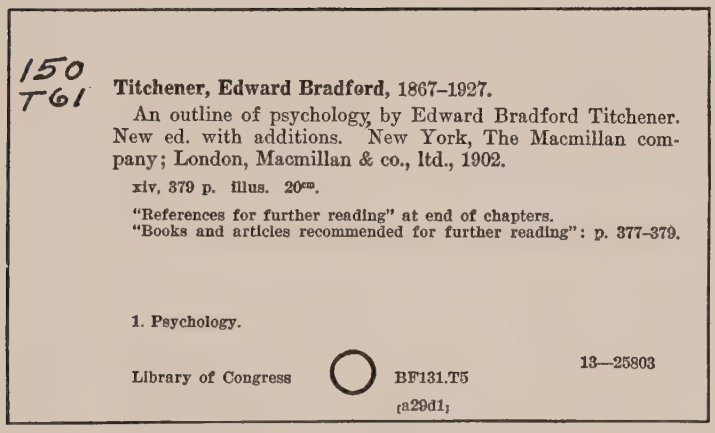
c. Library bulletins of accessions. Libraries wishing to meet the demand for catalogs which can be taken home print bulletins listing the books added each quarter or each month and distribute them freely. These furnish the reader with a list of the recent accessions. Such bulletins, when bound and supplied with an annual index, furnish a certain form of book catalog which will meet the needs of the reader and make a very useful adjunct to the card catalog. They in no way take the place of the complete card catalog, because the entries are not cumulated, nor are they strictly up-to-date.

d. Cumulated book catalogs. A compromise between the card catalog and the book catalog is the cumulated book catalog. In a catalog of this type the entries are kept in type; that is, the printer preserves his type after it has been cast

in single lines. These lines furnish the movable unit, making possible the intercalation of other lines. The entries by this method are kept up to date in type and are ready for reprinting at stated intervals. This gives the public a cumulated catalog in book form within limits. This method of printing, called the linotype process, is used by the H. W. Wilson Company in publishing its various cumulative indexes.

e. Sheaf form. The sheaf catalog is one in which cards or slips are put into a loose leaf binder of the same size as the cards. This form is frequently found in the libraries abroad. It has some advantages over both the book and card catalogs, but it will not find much favor in America so long as printed cards are used. It would be difficult to fix these into a loose leaf binder and the filing would be tedious.

3. Card catalog the accepted form. Since the card catalog has been generally accepted in American libraries, it will be the form considered throughout this text. It is well to remember, however, that a card catalog can at any time be


150
T61

Titchener, Edward Bradford, 1867–1927.

An outline of psychology, by Edward Bradford Titchener. New ed. with additions. New York, The Macmillan company; London, Macmillan & co., ltd., 1902.

xiv, 379 p. illus. 20cm.

"References for further reading" at end of chapters.
"Books and articles recommended for further reading": p. 377–379.

1. Psychology.

Library of Congress BF131.T5 13—25803
[a29d1]

printed in book form. It is the basic form of any catalog, because no catalog, even that in book form, can be accumulated into a complete file unless entries are first prepared on slips or cards. It is only by means of a flexible base that entries can be properly intercalated.

a. Content of the card. The technical description of the book as given on the catalog card may be summed up in six groups: (1) Call number, (2) Author of the book, (3) Title group, (4) Imprint group, (5) Collation group, (6) Notes.

Of the items on the card on the preceding page

(1) Call number=150 T61
(2) Author=Titchener, Edward Bradford, 1867–1927
(3) Title group=An outline of psychology, by Edward Bradford Titchener. New ed. with additions
(4) Imprint group=New York, The Macmillan company; London, Macmillan & Co., ltd., 1902
(5) Collation group=xiv, 379p. illus. 20cm
(6) Notes="References for further reading" at end of chapters. "Books and articles recommended for further reading": p. 377–379

Author. It will be noted that the author is given the place of prominence on the card. This is as it should be, since the author entry is the basic entry. It is called in cataloging parlance the *main entry.* The author's personal name is always inverted like the names in a directory, to bring the family name first. The family name, or surname, is followed by the forenames, if it is possible to locate them, so that authors of the same family may be easily distinguished and all books of the same author may be brought together, no matter what variations in name may appear on the title-pages of his books.

Title. The title, including the edition, is the next item on the card. The fulness and importance of the title was discussed in Chapter II. All titles in foreign languages are entered in the language used on the title-page, but if the library wishes, a translation may follow the title or be added to the card as a note.

Imprint items. These items have already been treated in Chapter II. They appear on the card as the fourth group following the title, but separated from it.

Collation. The collation is given as an adjunct to the card rather than as a part of the other four items. These items are not a part of the title-page of the book, but they serve to describe the book more fully and to aid the reader in his selection.

Notes. The use of notes is dependent on the make-up of

the individual book. The most commonly used notes are: contents, bibliographies or references, and series. The *series note* is added directly after the collation. If, in the title cited above, the book belonged to a series called: Text-books on psychology, the collation would read:

xiv, 379p. illus. 20cm (Text-books on psychology)

The make-up of the above card is typical of cards used in many library catalogs. It may, of course, be shortened in certain particulars if the items as given are considered superfluous. The question of a briefer card is discussed in Chapter XVI.

4. Unit card.

a. Definition. The above card may be considered as a unit card for this special work by Titchener. By unit card is meant one standard card made for an individual work which, when duplicated, may be used as a unit wherever an entry for that book is to appear in a card file; in other words, there must be as many copies of this unit card as there are entries for the book, e.g.: Assuming that the unit card form is to be used as catalog cards and shelf-card, three Titchener cards will be required—1 for author, 1 for subject Psychology, and 1 for shelf-card.

b. Unit card of the Library of Congress.[1] The most generally used unit card is that printed by the Library of Congress. These cards may be purchased at a cost which is within the reach of nearly all libraries. The price is very reasonable when one considers that in purchasing the cards the library also buys a bibliographical service of a grade which would be impossible to secure if the cataloging were done in the average library where bibliographical tools are frequently wanting. The catalog at the Library of Congress is done by experts and, in addition to the cataloging entry proper, many L. C. unit cards contain the subject headings used by the Library of Congress in its dictionary catalog, the classification symbol taken from the Library of Congress scheme, and all added entries required to catalog fully each book.

[1] L. C. printed cards are described in Chap. XV.

Perhaps no cooperative movement has so revolutionized library work as has this scheme of cataloging, which has extended the expert service of the Library of Congress to every library in the country. These cards are treated in detail in Chapters XV and XVI.

c. Unit cards replace old types of cards. Before the printed card service was inaugurated by the Library of Congress, the unit form of card was not in general use. On the manuscript cards formerly used, entries were shortened, information was curtailed, and each card was made in a form peculiar to its special purpose. The author card was considered to be the main card and corresponded to the unit card as that is now used. Title cards, added entry cards, and series cards were made, each according to a different model, making it necessary for the cataloger to learn five or six forms of cards for one book. Now it is usual, except in very small libraries, for the cataloger to make but one card and have it duplicated as many times as necessary to supply all added entries needed.

Within the last twenty years the unit form of card has grown in favor and its uniformity and accessibility in printed form have materially lessened the work of the cataloger. The reader has before him a catalog each entry of which is full.

d. Value of the unit card. The value of the unit card may be summarized as follows:

(1) Gives the reader a card containing full information under any entry
(2)[1] Provides a standard card which may be used in library records other than the catalog
(3) Relieves the cataloger of unnecessary mechanical work
(4) Is less expensive because cards can be multiplied at less cost than is possible if many models are used
(5) Saves revision when duplicated by mechanical methods and insures a more accurate set of cards for each book
(6) Can be purchased for nearly all titles from the Library of Congress
(7) Is the form adopted by all libraries printing catalog cards
(8) Makes cooperative cataloging possible

5. Uniformity of catalog cards. The unit card of the Library of Congress, as has already been pointed out, has

[1] See Chap. XV, sec. V, p. 294.

furnished a standard as to form, size, and style of card. Naturally those libraries making their own unit cards will want to conform to the same model. This accepted form has been adopted, after careful experimentation, as the form most convenient and most economical. Emphasis is given certain items on the card by their position and by the spacing which surrounds them. The card catalog aims at preserving the same appearance the entries would have if they were listed on the page of a book; therefore, each card must present the same uniformity of style and structure. The card catalog must be looked upon as a publication of the library. The fact that it is in card form does not discount its importance as such a work. The same painstaking editing given to any literary production should go into its preparation. Just as a book catalog is printed with uniform indentions and spacings, so each card follows a definite style in order to give the same uniformity as the printed page. Card entries and book entries differ in that each card, being a separate unit, must bear the heading under which it is filed, while in the catalog in book form the heading need appear but once on a page where all entries contribute to the same subject.

If a number of catalog cards are placed one below the other on a flat surface, one can at once recognize how like a page the entries become.

II. Catalog Based on Principles

The multiplicity of entries which must be used in the compilation of a catalog furnishes the real technical problems for the cataloger. To choose, arrange, correlate, and harmonize the information which must appear on the catalog card is the crux of the whole problem.

1. Technique. The cataloger must be a technician as well as an analyst, and must know the catalog itself thoroughly. He must know book technique, be skilled in its application, watchful of technical matters in his own work and in that of others, interested in structural matters, sensitive to flaws, appreciative of good work, and be willing to develop his problem only as rapidly as practical conditions make

advisable. The divorce of accuracy and speed is frequently taken for granted. They should be fellow-workers. It is not thoroughness which makes work a burden. It is overscrupulosity, letting non-essentials cover the salient points.

To cope with such a particular technical problem necessarily requires prodigious care, unlimited patience, and unfailing accuracy. There must be a technique which shall cover the mental side of the problem of cataloging, and also a technique which shall allow for thousands of books to be transferred from shelves to readers, from department to department, and from schools, homes, and stations. There will be records auxiliary to the catalog which must be maintained with accuracy and precision.

Too much emphasis cannot be placed on attention to *necessary details,* but there is no point in the process of library work where so great judgment must be exercised as when developing these details; they must be reduced to a minimum. New records should not be started unless their necessity is proved and their upkeep assured. Experience has confirmed the fact that a record once started must be rigorously maintained or it becomes worthless. The cataloger must watch every link in the chain of operations and not develop one thing out of proportion to others. It is false economy, for example, to build up a barricade of red tape in order to protect an inaccurate worker, or to institute elaborate records requiring hours of time to maintain but providing for a case so unusual that it is out of proportion to the error which might occur were such a file not kept.

The cataloger cannot afford to become so engrossed in technique as to lose sight of the aims of the work. There is nothing progressive in the confusion of processes with principles, in the breathless disregard of the larger issue. "The letter killeth and the spirit giveth life." To preserve a sane and wholesome attitude towards this task is essential if one wishes to hold the right perspective, keep abreast of the times, and maintain the poise and patience which is required of every cataloger. The cataloger should possess the best traits of a scholar, an administrator, and a good clerical worker, and

must have such a clear conception of his work that nothing can interfere with the proper balance of these traits.

2. Rules and regulations. The catalog must be constructed on a scientific base. It must be founded on rules and regulations which will insure uniformity and accuracy, so that it will be a dependable tool. It must be logical in the same way that the classification is logical. That is, its development must follow fixed policies which will guarantee a logical and orderly array of book information and which will fix limits so that the work can be held within certain boundaries and furnish regulations beyond which the uninitiated cataloger cannot penetrate.

J. C. M. Hanson brought out this need when he said:

> "[The catalog] cannot be developed according to methods which may serve in the compilation of a census, or in the mechanical handling of articles of merchandise. In dealing with such material a proper organization, distribution, and division of labor usually solves the problem. Not so in cataloging, where books have to be dealt with as literature. Here the intellect comes into play with all its niceties, and while several minds may work at different parts of a catalog, there must also be a central co-ordinating influence to insure harmonious development. It is for the purpose of maintaining this coordination and harmony that so many rules, regulations, and guiding principles are laid down."[1]

There must be safety measures both for the makers and the users of a card catalog. To maintain sound, friendly relations with its readers, and to protect itself against criticism which will inevitably arise when a miscellaneous public is working with a little known technical tool, the library will need to state its policies definitely and positively.

III. Catalog Codes

It is fortunate for the cataloger of today that printed rules for cataloging are available. These have only come after

[1] Hanson, J. C. M. The subject catalogs of the Library of Congress. A.L.A. Bulletin 3:392-93. Papers and Proceedings, September, 1909.

long years of discussion and the history of their development (which cannot be traced in full here) is most interesting.

One echo of this discussion is the phrase "Battle of the rules" which was used in reference to the ninety-one rules compiled by Sir Anthony Panizzi and his co-workers at the British Museum library in 1840. The same expression might well be applied to the struggles which were waged in America between the years 1876 and 1908. The early volumes of the *Library Journal* are full of discussions bearing on the disputed points in cataloging; in fact, so much repetition is there to be found on this subject that one may well ask the question if the over-emphasis of these details did not, in a measure, hurt the cause for which librarians were striving. It seemed, for a time, that the broader side of the question was quite forgotten in an over-zealous endeavor to find some common practice for the treatment of the details. There came out of all this discussion, however, some very definite decisions, so that when the Library of Congress and the Publishing Board of the American Library Association entered into an agreement in 1901 by which the Library of Congress was to print its catalog cards, a committee was ready to formulate rules which would form the basis for such work and give catalogers a code which would insure uniformity in practice.

Realizing the great advantage of having an international code, the American committee worked with a committee of British librarians and brought about an agreement on many of the rules included. If one will read the preface to the code he will better understand the history leading to this cooperation. This code, published in 1908 and entitled *Catalog rules: author and title entries,* and commonly called *A.L.A. rules,* is now (1929) the generally accepted code in America and has furnished the base for many codes recently issued in foreign countries.

1. A.L.A. rules.[1] As the title cited above implies, the

[1] Catalog rules: author and title entries. Compiled by committees of the American Library Association and the (British) Library Association. American ed. Chicago, A.L.A. Publishing Board, 1908.

See next chapter for references to specific rules in this code.

book covers author and title entries only. It must, therefore, be supplemented by other codes when subject catalogs are under discussion.

While the code was compiled for the use of large libraries, it is equally well adapted to the small library. It is not expected that all rules will be carried out to the letter by the small library, but any catalog of today should follow in general the code which has been officially accepted by the American Library Association and the Library of Congress. The fact that many libraries are now using Library of Congress printed cards makes it not alone desirable, but quite obligatory for libraries to accept this code. There are a few exceptions to Library of Congress practice, but such differences are usually noted in the code under the heading: *Library of Congress supplementary rules.*

Aside from the rules for entry, there are brief rules for capitals, punctuation, and transliteration, as well as a list of abbreviations. A few sample cards are included, but these are far from satisfactory. As this code will be used constantly in connection with this text, it will become too well known to students to need further explanation here.

a. Model cards. To facilitate the use of the A.L.A. rules and to give the cataloger a working tool to be used as explanatory to it, cards illustrative of each rule for entry have been selected from a Library of Congress depository catalog. A list of the order numbers for these cards, with the number of the rule they illustrate, is printed in Appendix I. By ordering these cards from the Library of Congress, adding to each the A.L.A. rule number, and arranging them numerically by this number, an individual or a class may have a ready reference file of cards which will help to elucidate each rule as it comes up for discussion.

Any number of model cards may be added to the file, such as short forms taken from Fellows' rules.

(1) Index to the model cards. An index can be made to the bibliographical details in this wise: Suppose that the card for rule 90 also illustrates the use of the phrase "No more published." In order to bring this out, make an index refer-

ence card referring to card 90. This can be carried as far as desirable, bringing into relief all the details which appear anywhere on the cards.

(*2*) *Purchase of model cards.* The Library of Congress has made a special price on these sample cards if all are ordered at one time. Single cards in the set may also be ordered at the same cost as libraries are paying for regular catalog cards.[1]

2. Official code. One code, and only one, should be officially adopted when making the catalog. This code should be annotated when any variations or exceptions are made in its rulings. Texts may be used to elucidate this official code, but it is impossible to combine any two codes and keep the catalog uniform and workable. It is quite patent that the A.L.A. code should be the one accepted.

3. Other codes and manuals. Students should naturally become familiar with other codes and manuals so that they may use them to supplement the A.L.A. rules. Cutter's *Rules for a dictionary catalog* is discussed with the dictionary catalog in Chapter X. A list of codes is appended to this chapter.

The manuals are:

a. Library of Congress. Printed catalog rules. These are largely the same rules as those incorporated in the A.L.A. code, together with new and revised rules. They are printed on cards and are supplied gratis by the Library of Congress to each library which subscribes to its catalog cards. To others they are sold. They furnish a very important tool for all libraries using Library of Congress cards and are necessary to an understanding of the points in cataloging exhibited by the cards.[2]

b. Fellows. Cataloging rules.[3] This is an explanatory manual, rather than a new code of rules. It was prepared by Dorkas Fellows, who was for many years an instructor in

[1] See Appendix I.

[2] For a description of these cards and cost of same see the latest edition of Handbook of card distribution, issued by the Card division of the Library of Congress (p. 92–93 of 1925 edition).

[3] Fellows, Dorkas. Cataloging rules. 2d ed., rev. and enl. Wilson, 1922. See next chapter for references to specific rules in this manual.

the New York State Library School. It is perhaps more useful as a teacher's manual than as a class code. Some catalogers have found that the great emphasis given to details of writing cards makes it almost too complex for a beginner to use without confusion, while others recommend it because of its thoroughness in detail. The chapters on anonymous classics, analytics, periodicals, corporate bodies, and some other subjects not fully explained in the A.L.A. code are especially valuable. The rules do not presuppose the use of the unit card.

c. Akers. Simple library cataloging.[1] This book was written, according to the introduction, "to give to the librarian, who lacks professional education and experience . . . the necessary directions for accessioning, classifying and cataloging a collection of printed material, in order that it may be available for use." The unit card is recommended and its use is explained. A chapter is also devoted to the Library of Congress cards. To compress into ninety-five pages the necessary information for a cataloger without professional training is a difficult task. The book is useful within its limits.

d. Hitchler. Cataloging for small libraries.[2] This manual will prove to be a ready reference book when a simplified form of catalog is used.

IV. Bibliography of Catalog Rules

1718–1894 Bibliography of catalog rules (in Dewey, Melvil. Library school rules, 1899, p. 41–46).
A chronological list giving new editions as well as the original. Some annotations including references to reviews of the codes.

1895–1923 List of catalog codes (in Bishop, W. W. Practical handbook of modern library cataloging. 1924, p. 82–83).
Covers some codes included in the 1718–1894 list.

Note: Codes not included in the preceding bibliographies and supplementary publications 1923–1927.

1897 Prague, K. K. Öffentliche und Universitäts Bibliothek. Amts-instruktion für die Ausarbeitung des Zellelkataloges

[1] Akers, S. G. Simple library cataloging. A.L.A., 1927.
[2] Hitchler, Theresa. Cataloging for small libraries. 3d ed., enl. Stechert, 1926.

der K. K. Offentlichen und Universitäts-bibliothek in Prag. Prag, Selbstverlag der Bibliothek, 1897.

1905 U. S. Library of Congress. Catalog division. . . . Supplementary rules on cataloging 1–11. (Washington, Govt. print. off., 1905.)
Continued on cards which may be purchased from the Card division of the Library of Congress.

1913 Association des bibliothécaires français.
. . . Règles et usages observés dans les principales bibliothèques de Paris pour la rédaction et le classement des catalogues d'auteurs et d'anonymes (1912) . . . Paris, H. Champion, 1913.

1914 Basel. Universität. Bibliothek.
Katalog-instruktion der Universitätsbibliothek Basel. Juni, 1914. Basel, Buchdr. Werner-Riehm, 1914.

1914 Oslo. Universitet. Bibliotek.
Katalogiseringsregler for den alfabetiske seddelkatalog ved Universitetsbibliotekets utenlandske avdeling, trykt som manuskript. Kristiania, Grøndahl & søns boktrykkeri, 1914.

1916 John Crerar library, Chicago.
. . . Cataloging rules supplementary to the "Cataloging rules . . . compiled by committees of the American Library Association . . ." and to the Supplementary cataloging rules, issued on cards, of the Library of Congress. Chicago, Printed by the Board of Directors, 1916.

1916 Stockholm. Kungliga biblioteket.
Katalogregler för Kungl. biblioteket, samt anvisningar för anordnande av bokband. Av riksbibliotekarien fastställda den 30 juni 1916. Stockholm, Kungl, boktryckeriet, P. A. Norstedt & söner, 1916. (In Kungl. bibliotekets handlingar. 36. 1913/15.)

1917 Denmark. Bogsamlingskomité.
Katalogisering. Raad og regler til brug ved ordningen af bogsamlinger, udgivet af Statens bogsamlingskomité. Kbenhavn, I kommission hos Gyldendalske boghandel, Nordisk forlag, 1917.

1919 Mexico. Biblioteca nacional, México.
Instrucciones para la redacción y formación de los catalogos bibliográficos según el sistema de Melvil Dewey adaptadas a las bibliotecas hispano-americanas, por Juan B. Iguiniz . . . México, Biblioteca nacional, 1919.

1919 Wisconsin. University. Library school.
[Cataloging rules on cards, comp. by Helen Turvill. New ed. Madison, Democrat printing co., 1919.]

1921 Norsk bibliotekforening
Forslag til katalogiseringsregler utarb. av Norsk bibliotekforenings katalogkomite. Kristiania, 1921.

1922 Italy. Commissione incaricata di proporre un nuovo codice di regole per la compilazione del catalogo alfabetico nelle biblioteche governative italiane.
. . . Regole per la compilazione del catalogo alfabetico. Roma, A Nardecchia, 1922.

1922 Munich. Bayerische staatsbibliothek.
Katalogisierungs-ordnung der Bayerischen staatsbibliothek, München. 2. ausg. München, J. Palm's buchhandlung, 1922.

1923 Bernhardi, Luise.
. . . Lehr- und handbuch der titelaufnahme, von L. Bernhardi. Berlin, Wiedmann, 1923.

1923 Oxford. University. Bodleian library.
. . . Rules for author-catalogue of books published in or after 1920. (Oxford, Printed at the Oxford university by F. Hall) 1923.

1923 Paris. Bibliothèque nationale. Département des imprimés.
Usages suivis dans la rédaction du Catalogue général des livres imprimés de la Bibliothèque nationale, recueillis et coordonnés per E. G. Ledos. Paris, E. Champion, 1923.

1924 Aberdeen. University. Library.
Condensed cataloguing rules as followed in the University library, Aberdeen. 2d ed. rev. Aberdeen, The University press, 1924.

1924 Guppy, Henry. Suggestions for the cataloguing of incunabula. Printed for private circulation (Aberdeen, The University press) 1924.

1924 Netherlands (Kingdom, 1815-) Rijkscommissie van advies inzake het bibliotheekwezen.
Regels voor de titelbeschrijving, vastgesteld door de Rijkscommissie van advies inzake het bibliotheekwezen. Leiden, A. W. Sijthoff, 1924.

1924 Kotula, Rudolf.
Instrukcja o katalogach alfabetycznych bibljotek naukowych, opracował dr. Rudolf Kotula. Lwów, Wydawnictwo Towarzystwa naukowego we Lwowie, Zasiłkiem Ministerstwa wyznań religijnych i oświecenia publicznego, 1924.

1927 Cambridge. University. Library.
. . . Rules for the catalogues of printed books, maps, and music. Cambridge, The University press, 1927.

1927 Wallace, Ruth, ed. The care and treatment of music in a library. Chicago, American Library Association, 1927. (American Library Association Committee on cataloging. Contribution No. 1.)
Contains rules for the cataloging of musical scores approved by the Committee on cataloging, p. 15–31.

V. Definitions

Before beginning the study in the next chapter of a definite type of catalog it will be necessary for the student to become familiar with the following definitions:

Added entry. A secondary entry, i.e., any other than the main author entry. There may be added entries for editor, translator, title, subjects, etc. (A.L.A.)

Analytical entry. The entry of some part of a book or of some article contained in a collection (volume of essays, serials, etc.) including a reference to the publication which contains the article or work entered. (A.L.A.)

Author catalog. An alphabetic catalog of author entries, and author added entries such as editors, translators, etc. It may contain also titles, but is then more properly called an author and title catalog.

Catalog. A list of books which is arranged according to some definite plan. As distinguished from a bibliography, it is a list of books in some library or collection. (Cutter.)

Class catalog, also called Classified catalog and "Catalogue raisonné." A catalog in which the subject entries are arranged in a definite scheme of classification. If the Library of Congress scheme has been adopted, for example, the cards in the subject catalog would follow the same arrangement as that followed by that scheme. The Notation of the system would determine the filing of the cards. The Decimal classification could be used in the same way, that is, with the entries arranged by the Decimal notation.

Cross-reference. Reference from one term or name to another.

Dictionary catalog. A catalog in which all entry words (author, title, subject, and form) are arranged in one alphabetical file. Entries are related by means of references. This catalog received its name from its similarity to a dictionary in arrangement.

Entry. The registry of a book in the catalog.

Entry word. The word, phrase, or name which determines the order. Often called in this text "Filing medium."

Filing medium. That part of the entry under which a card is filed.

Form entry. An entry which lists books according (1) to the form in which their subject material is organized, e.g., Periodicals, Essays, Poetry, or (2) to their literary form, as Poetry, Drama, Fiction.

Guide cards. A card, having a labeled tab higher than the regular cards, which when inserted in the catalog serves as an aid in locating the cards which are filed in the tray.

Heading. The word by which the alphabetical place of an entry in the catalog is determined, usually the name of the author, of the subject, or of the literary or practical form, or a word of the title. (Cutter.) This is usually interpreted broadly to mean any name, phrase, term, or title used as a filing entry on the card. Naturally

this name or word, or the first word of a phrase or title, determines the alphabetical place of the entries in the catalog.

Main entry. The principal entry; usually the author entry, and in a card catalog it is the entry from which all other entries are traced.

Official catalog. A catalog kept in the catalog department for the official use of the catalogers. It is more fully explained in Chapter XVII.

"See" references. A direct reference from a term or name under which no entries are listed to a term or name under which the entries are listed.

"See also" references. A reference to or from terms indicating where additional or allied information may be found.

Specific entry. Registering a book under a heading which expresses its special subject as distinguished from entering it in a class which includes that subject. (Cutter.)

Subject. The theme or themes of a book, whether stated in the title or not. (Cutter.)

Subject catalog. A catalog of subjects, whether arranged alphabetically by terms, or logically by some definite system of classification.

Tracing. Indications on the main card showing what added entry cards have been made for the definite book. In most cases the exact headings as used on added entry cards are repeated as tracing, but abbreviations such as t. for title may be used. (See Fellows rule 25, and Akers p. 49–51.) These two authorities differ as to position of the tracings on the back of the main card. Most libraries seem to prefer the method given in Akers, i.e., on the left hand side of the card.

References

Note: Akers and Fellows may be used to advantage as reference manuals in connection with this chapter.

Barden, Bertha. The unit card and the teaching of cataloging. Libraries 33:179–80. April, 1928.

Bishop, W. W. Practical handbook of modern library cataloging. 2d ed. Williams and Wilkins, 1924.
Brief sketch of the history of library cataloging, p. 11–19. Planning the catalog (including use of the unit card) p. 37–43.

Brown, J. D. Library classification and cataloguing. Grafton, 1916.
Codes and decisions, p. 82–88; Classification and cataloguing, p. 95–99; The form and compilation of catalogues, p. 137–214.

Howe, H. E. The catalog. (Manual of library economy) A.L.A., 1927, p. 1–6, 8–10.
Use and form of the catalog. Brief.

James, M. S. R. Progress of the modern card catalog principle. Public Libraries, 7:185–89. May, 1902. Also in Sawyer, H. P. The library and its contents. Wilson, 1925, p. 331–38.

Johnson, Margaret F. Cataloging and classification for elementary school libraries. Wilson, 1929.
A suggestive manual. The use of the unit card is advocated,

but an entry more simple than that of the Library of Congress is recommended.

MARTEL, CHARLES. Cataloging, 1876–1926. Library Journal 51:1065–69. December 1, 1926.
A valuable summary to 1926. Some allusions may not be understood by the beginner.

MASH, M. H. B. Cataloguing codes. The Librarian 4:135, 155, 195, 239. 1913–14.
An interesting comparison of the "Cutter," "A.L.A.," and "L. A." rules.

MINTO, JOHN. The Anglo-American cataloguing rules (a review). Library Association Record 11:289–302. 1909.
Favorable to A.L.A. code. Points out the few differences between the A.L.A. and L.A. rules.

THOUGHT QUESTIONS

1. Examine the card catalog in a local library and state how many questions it can answer about an individual book.
2. Examine two catalogs in book form which are available and compare the arrangement of the entries.
3. Would you prefer to use a book catalog or a card catalog? State reasons for your preference.
4. What does the classification scheme accomplish for a book collection which the alphabetical catalog cannot?
5. Write a descriptive review of *Catalog rules; author and title entries, compiled by committees of the American Library Association and the (British) Library Association, 1908.*

Chapter VIII

The Dictionary Catalog—Author and Title Entries

I. Definition of a Dictionary Catalog

II. Author Entries
- 1. Authorship determined
- 2. Persons as authors
  - a. Form of the name
  - b. Name references
- 3. Corporate bodies as authors
  - a. Societies and institutions
  - b. Governments
  - c. Miscellaneous bodies or organizations
- 4. Other forms of author entry
  - a. Anonymous works
  - b. Bible and similar sacred books. Anonymous classics
  - c. Periodicals. Yearbooks. Cyclopedias

III. Title Entries

IV. Summary

I. Definition

The dictionary catalog is a strictly alphabetical catalog throughout. Entries for authors, titles, subjects, and forms of literature (that is, belles-lettres) are amalgamated into one alphabetical file. In other words, it is a catalog made up of an author catalog, a subject catalog, a more or less complete title catalog, and a more or less complete form catalog, all interwoven into one file. It takes its name from its resemblance to a dictionary in arrangement.

This chapter will be limited in scope to the author and title entries in the dictionary catalog. Subject and form entries will be discussed in Chapter IX.

II. Author Entries

1. Authorship determined. The author has already been defined as the one who is the writer of the book or the person

or body responsible for its existence. As was noted in the chapter on classification, the author is not given primary consideration when arranging books on the shelves. With the exception of the books classing in literature, subjects rather than authors determine their location. The catalog must therefore furnish an author key to the collection.

Users of the library may want to know if the library has an individual work by a certain author and also how many and what works he may have edited, compiled, or revised, and what introductions and prefaces he may have written. In fact, we must spread out before the reader all the literary achievements of each writer as represented in the library so that his works may be studied singly and as a whole.

Innumerable and interesting complications are met when the cataloger attempts to establish the authorship of a book and to choose a form of entry which will be acceptable to staff and readers.

Authors' names appear on title-pages in all sorts of forms and delusions. Some names are so brief that identification at first glance is impossible, and others bear family names preceded by so many forenames that to list them would be to ensnare the users of the catalog.

Writers bearing no relationship whatever frequently have the same initials, and the cataloger must discover the forenames of each for the sake of individual identification. Even members of the same family bearing the same name must be differentiated in the catalog. Alexander Dumas, père, must not be confused with Alexander Dumas, fils, and Henry James, Jr. must be distinguished from his father, who had the same name.

Assumed names are often baffling; unless these are detected and the real names are found, books by the same author are going to be separated in the catalog. An author often writes his first book under his true name, his second under an assumed name, and later books under varying forms of either. This may be made clearer by an illustration. Take the name of James Owen Hannay, who writes under the pseudonym of George A. Birmingham. It is possible for

this author to use the following forms of name on the title-pages of his books:

(1) George A. Birmingham
(2) G. A. Birmingham
(3) James Owen Hannay
(4) James O. Hannay
(5) J. Owen Hannay
(6) J. O. Hannay

If the title-pages are followed in this case and the books are entered under all six forms of name, it will be impossible to find the works of this author together in the catalog or on the shelves, because there is every chance that other names may file between these various forms of Hannay's name.

The reader does not know or care what name is on the title-page; he only knows that he wants a book by Birmingham while another knows he wants one by Hannay. It is the cataloger who must simplify these intricacies and bring all of the author's works together under one form of name. *One* form must be adopted and used each time in listing this author's books, even though some title-pages print the name in another form.

Since the form of the author's name on the title-page has not been chosen with the needs of the cataloger in mind, it must frequently be changed, because the catalog must supply certain combinations of information which the title-page may not give.

This search for information to establish correct author entries adds an element of reference work for the cataloger which the reference assistants may well envy. It is through the results of this critical search in other catalogs and reference books that the cataloger acquires a bibliographer's sense which assures an accurate and dependable catalog.

One need but examine a few hundred books to realize that the preparation of any library catalog constitutes one of the most important and painstaking tasks in the field of library science, not alone because it is a piece of work requiring the greatest care and intelligence, but because effective use of

the book collection by the staff and readers depends on the perfection of its execution. The catalog is the brains of the library; into it is concentrated the essence of each book. All activities of the library will depend upon this tool and be influenced by its guidance; therefore, the cataloger must be on the alert to detect every bit of information which may be useful in making the catalog a repository of accurate information.

The question as to how far a library can adopt the go-as-you-please plan of cataloging has been disputed ever since libraries began to think about uniformity, but with the cost of cataloging mounting, and the number of books and pamphlets multiplying rapidly, the need of conforming to prescribed rules for entry is becoming not only more popular but almost compulsory. In an effort to simplify, catalogers may still make their catalogs brief and follow obsolete rulings, but such procedure is only making trouble for those who come after them. Simplification does not consist in the elimination of essentials; it means a recognition of essentials and their most effective use, not only today, but in years to come. Simplification in 1929 may mean an entire reorganization in 1939. Even the small library should watch its development so that its catalog and its records may not only be expanded with the book collection but may be adapted to the new cooperative schemes on which all future records must be built. This means that every cataloger must be familiar with the principles of cataloging, with the movements now developing toward cooperation and centralization, with the rules under which these movements are working, and lastly and most important of all he must know the research tools.

Coming back to the practical question of the author entry, the study may be considered under the following headings: Persons as authors; Corporate bodies as authors, the latter including governments, societies, institutions, miscellaneous bodies and organizations; and Other forms of author entries, as anonymous entries, those for the Bible and other sacred books, and those for anonymous classics.

No attempt will be made to discuss all the rules in the

catalog codes covering the above groups, but a few definitions and explanations may serve as an introduction to work in the laboratory where the actual cataloging of books will illustrate these rules and at the same time drive home the necessity of working cautiously, verifying carefully what is on the title-page, and searching for necessary information which is not on the title-page or in the book.

References to the A.L.A. rules[1] and to Fellows[2] are appended to the following paragraphs. The number of the rules, and *not* page number, is given. These same A.L.A. rule numbers refer to the model cards listed in Appendix I.

2. Persons as authors.

Probably the majority of books are written by one *individual,* but frequently two or more persons collaborate, in which case both, or all, must be considered as responsible for the book. Such authors are called, in library parlance, *Joint authors,* and each may be entered in the catalog. The first name mentioned on the title-page becomes the main entry; others are treated as added entries. (A.L.A. rule 2 and footnote; Fellows, 53–54.)

Persons who have *edited, compiled,* or *translated* the works of another, unless they have changed materially the text of the original author, do not take precedence over the one who wrote the original text. (A.L.A. rule 169; Fellows, 38–42.) On the other hand, if an editor or a compiler gathers together the works of three or more authors, making thereby a new combination or a new book and one with its own independent title-page, such a compiler or editor is considered responsible for its existence and becomes the main author entry. (A.L.A. rule 126; Fellows, 60–64.) Example:

Compiler and editor as main entry

(a) Stevenson, Burton Egbert, comp.
Home book of verse

(b) Moses, Montrose Jonas, ed.
Representative American dramas

[1] Catalog rules; author and title entries. Compiled by committees of the American Library Association and the (British) Library Association. American ed. A.L.A. Publishing Board, 1908.

[2] Fellows, Dorkas. Cataloging rules. 2d ed., rev. and enl. Wilson, 1922.

Engravers, illustrators, designers, cartographers, architects, commentators, and composers are responsible respectively for books of engravings, pictures, designs, maps, plans, commentaries, and musical scores.[1] (A.L.A. rule 4–8, 13; Fellows, 43.)

a. Form of the name. After the author has been established, the next step is to determine the form and fulness of the name to be used as the filing medium in the catalog. Here again both reference books and rules must come to the aid of the cataloger. Author's usage and the custom of his country are frequently influencing factors. While the general rule is to enter under the surname of the author there are exceptions. *Compound names* and prefix names bring up the question of entry, under the last or the first part of the name. (A.L.A. rule 25–26; Fellows, 59e and 59k.)

(*1*) *Changed names, pseudonyms.* Persons who have changed their names must be entered in some uniform way. Shall women, who have written both under their maiden names and their married names be entered under the last names or the maiden names? Shall persons writing under assumed names be entered under their real names, or under the pseudonyms used? Entry for names of this kind have been long under dispute and each country has made its own rulings. Before the rule can be put into effect the cataloger must determine how many and what names the writer has used, which is the real name, which are maiden names, and which are married names. This means that students, before attempting to catalog, must become familiar with biographical dictionaries, also dictionaries of pseudonyms and other reference guides. (A.L.A. rule 38–41; Fellows, 85–90.)

(*2*) *Sovereigns, noblemen, ecclesiastical dignitaries.* Kings and other rulers are usually known by their forenames and must be so entered in the catalog. Titles of noblemen present the question whether it is best to enter these under the family name or the latest title. (A.L.A. rule 31–36.)

(*3*) *Vernacular form of the name.* The vernacular form

[1] See rules for musical scores in Wallace, Ruth, ed. Care and treatment of music in a library. A.L.A., 1927.

of the name, that is, the name of one's native language, is usually accepted, but there are exceptions to this rule. For example, shall Latin names be entered in their original language or shall they be anglicized? Shall Oriental writers living in Mohammedan countries be entered under the personal name or under the special name derived from the author's place of birth?

These are only a few of the instances where language must be considered before the correct entry can be chosen. (A.L.A. rule 26–27, 42–56.)

b. Name references. The cataloger's obligation does not end with the choice of the name. In making his decision to accept a certain form, he has provided for the reader who agrees with him in his choice; but there will be hundreds of users of the catalog and many members of the staff who have quite a different name in mind when looking for works of the same author. To satisfy readers and staff, cross-references must be provided. These must guide the reader who knows the author by a name different from the one in the catalog, or who may have been culling citations from other catalogs and bibliographical guides. To provide for these readers the cataloger, not being familiar with all the vagaries of authors, must know how the standard reference books and catalogs are treating each entry. (A.L.A. rule 171; Fellows, 56–59.)

An examination of several authorities will reveal how difficult it would be to pass from one bibliographical tool to another if these name references were not provided. We find the name of Thomas à Kempis entered under KEMPIS (Thomas Hemerken ou Malleolus, dit a) in the catalog of the Bibliothèque Nationale; under HAEMMERLEIN, (THOMAS) A KEMPIS in the catalog of the British Museum; and under THOMAS À KEMPIS in the catalog of the Library of Congress. Another more common name, that of John Lubbock, is entered under AVEBURY, JOHN LUBBOCK, 1ST BARON in the catalog of the Library of Congress, and under LUBBOCK, (RIGHT HON. SIR JOHN) BART. in the catalog of the British Museum and in the *Dictionary of national biography.* The popular author "O. Henry" is entered under his real name:

PORTER, WILLIAM SYDNEY in the *A.L.A. catalog 1926* and under HENRY, O. in the Pittsburgh catalog, while neither catalog has a reference from O. HENRY, which is probably the form of the name most frequently used by our readers.

These variations prove that the reader who has been looking up John Lubbock's works, for example, in the British Museum catalog must find a reference card telling him that the same author's works in the local library are entered in the catalog under AVEBURY. Unless these references are made the catalog loses half its value.

To insure accuracy and uniformity in names, as well as to become cognizant of every variation of name used by an author, and make the necessary references, the cataloger keeps an official *Authority list*. This is a list of all personal and corporate names appearing as headings in the author catalog with references to books in which each name and its variants were found. It is a means of saving information once searched, and gives the cataloger a ready reference to the name as used in the public catalog. If L. C. cards are used no authority card is needed. (Fellows, App. 3, p. 273–79.)

3. Corporate bodies as authors. Corporate bodies are usually governed by a board of directors or a board of trustees. Such a board has its officers, each of whom is merely a representative of the institution or body and is acting for that institution or body, so the name of the society or institution and not the name of an individual becomes the author entry. For example, the AMERICAN HISTORICAL SOCIETY is author of its Reports; TORONTO UNIVERSITY is the author of a series of Studies; the RUSSELL SAGE FOUNDATION is the author of a Bi-monthly bulletin; the BOSTON CHILDREN'S AID SOCIETY is author of its Annual report; the U. S. DEPARTMENT OF AGRICULTURE is author of its Yearbook. The student will notice that "Studies," "Bi-monthly bulletin," "Annual report," and "Yearbook" are titles.

The title-page sometimes bears the correct name of these bodies, but usually the name must be verified. Changes often occur in the name from year to year, causing many complications for the readers who may wish to trace the consecutive

publications of these bodies through a period of time. For example, the title-page of the annual report of an institution for 1900 may contain one name, and the title-page for 1906 quite a different one. The cataloger must discover when the name was changed and give this information to the reader who may know only the new name.

It is not unusual for a title-page to read—"Annual report of the hospital, 1924–25." In this case the title gives no name or location for the hospital. One must look through the book and see if by any chance the name of the place of publication or the printer will help to locate the name of the institution.

Corporate entries include (a) societies and associations of all kinds, as scientific, benevolent, and moral, even when strictly local or named for a county, state, country, or province; also for clubs, guilds, orders of knighthood, secret societies, intercollegiate societies, Greek letter fraternities, Young Men's and Young Women's Christian Associations, affiliated societies, political parties, and religious sects; (b) institutions (establishments), as schools, colleges, universities, libraries, museums, galleries, observatories, laboratories, churches, monasteries, convents, hospitals, asylums, prisons, theaters, chambers of commerce, botanical gardens, and buildings; (c) governments, as countries, states, provinces, municipalities, ecclesiastical, military, or judicial districts; (d) miscellaneous bodies or organizations, as conferences, congresses, exhibitions, and other occasional meetings, firms and other business concerns, committees and classes of citizens not belonging to any body or organization, ecclesiastical councils, foundations and endowments, expeditions, and ships. (A.L.A. rule 100–11; Fellows, 136–44.)

a. Societies and institutions. The general (A.L.A. rule 72) rule for the entry of societies and institutions is to "enter under the first word (not an article) of its corporate name, with reference from any other name by which it is known, especially from the name of the place where its headquarters are established." (A.L.A. rule 72.)

The question will immediately arise: How can one know what is the corporate name? The answer is not easy unless

the charter or by-laws of the society or institution happen to be printed in the publication being cataloged; this is one of the first things the cataloger should look for.

If the name is not found, reference books and other catalogs, such as the *Union list of serials,* should be consulted. Not only should the cataloger verify the present name but also locate the different names under which the society has been known; this is necessary in order to make the references required.

There are many exceptions to the general rule quoted above which require careful study. (A.L.A. rule 72–99.)

The whole subject of cataloging these publications has been covered in such an excellent way by Harriet Wheeler Pierson in her book entitled *Guide to the cataloguing of the serial publications of societies and institutions* that further reference here is unnecessary.[1]

b. Governments. Governments (states, provinces, municipalities, ecclesiastical, military, or judicial districts) are the authors of their official publications. (A.L.A. rule 58–71; Fellows, 145–57.)

Before one can catalog publications issued as government documents, a study should be made of the administrative organization of the offices from which they come, in order to be sure of the correct name of the departments, bureaus, or divisions, and to place these in their proper relation to superior offices. The cataloger must also trace the continuity of these publications for the reader. For example, the catalog must show that the Reports of the Panama Canal were submitted from 1899–1902 by a certain Isthmian canal commission; that this commission was discontinued and that a new one took up the work, serving from 1904–05; that still another served from 1905–14 when the commission was discontinued because of a change in administration; and that the Governor of the Panama Canal Zone became the author of these reports.

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[1] Pierson, H. W., comp. and ed. Guide to the cataloguing of the serial publications of societies and institutions. Govt. Print. Off., 1924.

Much information on the make-up of these publications is to be found in the catalogs issued by the U. S. Superintendent of Documents. The *Monthly catalogue* issued from this source and also the *Weekly list of selected United States government publications* (distributed free) are especially valuable for changes in names and other current information of use to the cataloger.

Many of these government documents are very similar to other books. They happen to be published, not by an individual firm, but by countries, states, cities, or towns. Some are issued in various editions and made up into somewhat involved series, but when these have been ferreted out many of them can be cataloged after the rules for the average book.

The first thing to remember is that an official publication of a government is entered under the name of the place. The United States, for example, is the author of its official publications; it corresponds to the family name in personal entries. Because of the number of publications entered under this name, subdivisions are used; these are the departments, bureaus, and important divisions from which the documents emanate, e.g., U. S. Department of Agriculture.

If the publication issued by a department or bureau has been prepared by some expert outside of the government service, he is considered the author. (A.L.A. rule 60.) Since the government is responsible for publishing the volume, it is usual to treat the department or bureau as an added entry. A clue to the real author is the phrase often printed under the author's name on the title-page. If, for example, the author is designated as a professor at the State College, Ames, Iowa, he is probably not a member of a government department, but has been asked to write the book because he is an authority on the subject.

Title-pages of documents are often either too meager or too full, and the cataloger must learn where to look for certain facts which will assist in locating the correct and true author. The letter of transmittal which accompanies many documents is one of the best clues. If there are several of these, the author of the document is quite sure to be the name

of the lowest office. The lowest office transmits to its superior and the next to the one higher up and so on, but the first office transmitting is responsible for the publication.

Catalog cards for most United States government documents can be purchased from the Library of Congress.[1]

The following entries taken from Library of Congress cards will serve to illustrate some forms of entry:

U. S. Congress
U. S. Congress. Joint commission on postal salaries
U. S. Congress. House. Committee on appropriations
U. S. Congress. Senate. Committee on agriculture and forestry
U. S. 66th Cong., 3d sess., 1920–1921
U. S. Constitution
U. S. Department of agriculture
U. S. Navy dept.
U. S. Dept. of the interior
U. S. Library of Congress. Division of bibliography
U. S. Bureau of the census
U. S. Children's bureau
U. S. Copyright office
U. S. Public health and marine hospital service
U. S. Coast and geodetic surveys
U. S. Superintendent of documents

It will be observed, from a study of these entries, that the Library of Congress cards retain the *official* name of the department, bureau, or office as a subhead under country. In the catalogs of United States documents compiled in the office of the Superintendent of Documents, the subdivisions under country are transposed to bring the important word first, as: *U. S. Agriculture, Dept. of.* Some libraries use this form.

c. Miscellaneous bodies or organizations. Conferences, congresses, exhibitions, firms, and like organizations are authors of their publications. Some of these may have only a temporary organization, but rules have been formulated to cover entries for the various types of organizations. (A.L.A. rule 100–19.)

[1] See Bulletins mentioned on p. 292.

Entries for authors of the above types have also been covered by Pierson's Guide, which has already been noted in this text.

4. Other forms of author entry.

a. Anonymous works. Books are said to be published anonymously if the name of the author does not appear in the book itself.

Frequently the name of the author is not on the title-page but will be found as a signer of the preface or dedication; or the name may be concealed in some other part of the book. If all efforts fail to establish authorship from the book itself, bibliographical reference books and catalogs must then be searched.

The reason for spending some time in locating the author is (1) to list this book with others of the same writer which were perhaps not issued anonymously, and (2) to furnish an entry for the book as it may have appeared in other catalogs and bibliographies.

If authors for anonymous books are found they are considered the main entry, but a title entry should be made in addition. If no author can be discovered the first word of the title not an article becomes the main entry. (A.L.A. rule 112–118; Fellows, 91–94.)

b. Bible and similar sacred books. Anonymous classics. The Bible and similar sacred books are entered under the name by which they are commonly known, as Bible, Koran, and Vedas. Epics, national folk-tales, and other anonymous classics are likewise entered under the name by which they are best known, as Nibelungenlied, Arabian Nights, Reynard the Fox, and Chanson de Roland. (A.L.A. rule 119–20; Fellows, 99.)

c. Periodicals, Yearbooks, Cyclopedias. Publications not identified with definite authors are entered under their titles as main entry. These include besides the three mentioned above: almanacs, newspaper directories, and collections (if the work of the editor is but slight). (A.L.A. rule 121–27; Fellows, 119–35.)

The cataloging of periodicals is very fully covered by Mary

W. MacNair in her pamphlet entitled *Guide to the cataloguing of periodicals.*[1]

III. Title Entries

It is often necessary to have title entries for books even if the same books have already been entered in the catalog under their authors. Titles beginning with a common term, such as history, elements, complete, etc., should seldom find place in the catalog, because the quantity of such entries would only confuse the reader. There is great danger of the reader confusing title and subject entries. It frequently happens that one believes he has exhausted the resources of the library after he has discovered *one* title card. For example, such a title as *Browning critics* would discount the entries under *Browning, Robert, Criticism.* A title *Concrete roads and pavements* may be interpreted as being the only book in the library on the subject of pavements, and the reader goes away thinking he has exhausted the resources of the library on this subject, when there may be ten other books entered under the subject heading *Pavements.* When titles conflict with subjects, a reference card will sometimes save the day, as *Concrete roads and pavements See Pavements.*

There seems to be a growing tendency in libraries towards a more generous supply of title entries, but judgment must be exercised in choosing these, and consideration must be given to conflicts with the other entries which go to make up the dictionary catalog. (A.L.A. rule 169, and special rules; Fellows, 36–37.)

Title entries, in addition to author entries, are usually made for:

1. Works of fiction, as, The street called straight, by Basil King.
2. Short stories, as, How the camel got his hump, by Kipling.
3. Dramas, as, Fanny's first play, by Shaw.
4. Poems having distinctive titles, as, The wine-press, by Alfred Noyes.
5. Striking titles not covered by 1–4, as, Thunder and dawn, by Glenn Frank.

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[1] MacNair, M. W. Guide to the cataloguing of periodicals. 3d ed. Govt. Print. Off., 1918.

6. Alternative titles if striking, as, War; or, *What* happens when one loves one's enemies, by John Luther Long.
7. Striking titles not included as the first words of the title, as, Personal history of *David* Copperfield.
8. Titles when the subject heading is not so definite or so specific as the title, as Greek vases, when the subject heading is Vases. (References may be used in these cases if preferred.)
9. Works (except Annual reports), the author entries of which are corporate names, as Factories and warehouses of concrete, issued by the Association of American Portland Cement Manufacturers.

IV. Summary

The author catalog is the basic catalog and the author card is the key card. It is from this card that all secondary entries (that is, all entries other than the main entry) are traced.

Research is necessary in establishing consistent entries.

Decision for the form of the author entry is based on a definite code of rules.

The reader and the library staff will go to the author and title catalog when they want the following:

1. An author and title index to the shelves
2. An author and title index to the shelf-list
3. The author of a book when only the title is known
4. The literary output of a definite author as represented in the library collection
5. The complete edition of the author's work
6. The selected works of an author
7. The specific work, or works, of an author
8. The translations of definite works (These are always entered under the author of the original work and frequently under the translator)
9. All editions of an author's works, or one specific edition
10. The pseudonym of an author when the real name is known
11. The real name of an author when the pseudonym is known
12. Other questions which are answered by references
13. Names of books belonging to a definite series

The author and title catalog is an essential tool to libraries of every size and every type. It is an integral part of the dictionary catalog but it answers only a small proportion of the questions which come to the average library. In the next chapter a study will be made of the subject and form entries which, together with the author entries, make up the dictionary catalog.

References

(See also references appended to Chapter VII)

Bishop, W. W. Practical handbook of modern library cataloging. 2d ed. Williams, 1924 (1927), p. 90–108.
Covers unit card and its contents.

Clarke, E. E. Cataloging (excluding subject cataloging) [of government publications]. In her Guide to the use of U. S. government publications. Boston Book Co., 1919, p. 204–29.

Frey, A. R. Cataloging of anonymous and pseudonymous literature. Library Journal 12:192–94. May, 1887.
Lecture before the Columbia library school, February 16, 1887. Gives the various forms of pseudonyms and tells how they are used. An interesting article, although somewhat out of date in its references.

Halkett, Samuel, and Laing, John. Notes on anonymity and pseudonymity. In their Dictionary of anonymous and pseudonymous English literature. Oliver and Boyd, 1926, v. 1, p. xi–xxiii.
An interesting and informing article on the use of the pen-name.

Hasse, A. R. U. S. government publications; a handbook for the cataloger. 2 pts. Library Bureau, 1902. o.p.
Pt. I. The government at large, the Constitution, statutes, treaties.—Pt. II. The legislative body.

Pierson, H. W. The gay science, the cataloguing of the publications of learned societies. Wilson, 1927.
A stimulating pamphlet.

———Guide to the cataloguing of the serial publications of societies and institutions. Govt. Print. Off., 1919. (Reprinted 1924.)
A very valuable code for catalogers. The section "Bibliographical suggestions" is excellent.

Robinson, O. H. Titles of books. In U. S. Bureau of Education. Public libraries in the U. S., pt. I. Govt. Print. Off., 1876, p. 715–32.
Difficulties met in listing titles.

Shaylor, Joseph. The use and abuse of book titles. In his The fascination of books. Putnam, 1912, p. 269–81.

U. S. Superintendent of documents. Author headings for U. S. public documents. Govt. Print. Off., 1907.
A useful pamphlet.

Thought Questions

Author and Title Catalog

1. Identify the following authors' names, and indicate what references you would make. Look these up in any library catalog or biographical reference books at your command.

   Fourth Earl of Chesterfield
   Anatole Leroy-Beaulieu

Madame Mary F. Robinson, 1857–
Pierre de Coulevain
Claude Ferval
Alice S. Green, who wrote Town life in the 15th century
Baron Czoernig, who wrote Ethnographic chart of the Austrian monarchy

2. Look up the A.L.A. rule for the main entry for cataloging the following, and rewrite each entry on a card in correct catalog form, indicating the number of the rule chosen.
   a. Foundry practice, by James Murray Tate and M. O. Stone
   b. Donatello, by David A. E. Lindsay (Lord Balcarres)
   c. Annual report of the Detroit public library
   d. Harper's school speaker, compiled by James Baldwin
   e. Poems, plays and Rosamund Grey, by Charles Lamb; edited by William Macdonald
   f. Ariadne in Mantua; a romance in five acts, by Vernon Lee, pseudonym of Violet Paget
3. Examine *Readers' Guide to Periodical Literature* and state its use in compiling an author catalog.
4. Write a descriptive annotation for *Dictionary of anonymous and pseudonymous English literature.* (Samuel Halkett and John Laing); new and enlarged edition, by James Kennedy and others. London, 1926.
5. Designate what main and added entries (exclusive of subject) you would make for the following:
   a. The last cruise of the Shanghai; being the story of the teakwood boat over the trail, by Frederic DeWitt Wells, illustrated by Philip Kappel, 1925
   b. Posters and their designers, by S. R. Jones; ed. by Geoffrey Holme, 1925
   c. The enchanted wanderer, by N. S. Lyeskov, tr. from the Russian by A. G. Paschkoff, ed. with an introduction by Maxim Gorky (fiction)
   d. A history of sculpture, by George Henry Chase and C. R. Post, 1924
   e. The house on Smith Square, by the author of The house on Charles street (fiction)
   f. Some masters of Spanish verse, by James Fitzmaurice-Kelly, 1924
   g. Terra cotta of the Italian Renaissance; plates issued by the National Terra Cotta Society, 1925
   h. Yiddish folk songs, compiled by S. P. Schack, piano arrangement by E. S. Cohen, 1924
   i. The Decroly class; a contribution to elementary education, by Amélie Hamaïde, collaborator with Dr. Decroly; with a preface by E. Claparède, tr. from the French by J. L. Hunt, 1924
   j. The green hat, by Michael Arlen (pseud.) (fiction)

Chapter IX

The Dictionary Catalog—Subject and Form Entries

I. Introduction
  1. The dictionary catalog and the classification
  2. Syndetic catalog
  3. Consider books in groups
  4. Two types of headings—Subject and Form

II. Subject Headings
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    c. Use common rather than technical terms
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III. Form Headings
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IV. Subject Cross-References
  1. References from specific to general terms
  2. When to make "see also" cards

V. Number of Headings for One Book

VI. Subject Analytics

VII. Conclusion

I. Introduction

Since the dictionary catalog is an *alphabetical* file it follows that the principles underlying the treatment of subjects are those governing (1) the choice of terms and phrases which will best express the content value of the books, and (2) the place these terms shall take in an alphabetical file of entries.

The dictionary catalog is, as Mr. Cutter has said, made for the person who wants a definite bit of information and who is neither pursuing general investigation nor trying to exhaust a subject. No knowledge of classification is required of the user of such a catalog; one is supposed to use it as he would a dictionary or other reference tools having an alphabetical arrangement of material, such as *Poole's Index, Readers' Guide,* or any other index.

1. The dictionary catalog and the classification. The same reasoning which is followed in determining the subject value of the books for purposes of shelving must be followed in determining the place of the subject entries in the catalog. The subject of a book is constant, but the method of representing that subject varies with the type of catalog one is making. For example, we have observed that the subject *Architecture* is expressed by 720 on the shelves when the Decimal classification has furnished the basis for arrangement, and that NA is used for the same subject if the Library of Congress scheme determines the arrangement. But in the dictionary catalog these symbols are disregarded in the arrangement of the entries and the word *Architecture* becomes the filing medium.

If the student will review for a moment the chapters on classification, he will see that the dictionary catalog supplements the classification of books on the shelves by making more direct the reader's approach to any desired subject without requiring from him a knowledge of any definite system of classification. On the library shelves the general books in each class are followed logically by those treating of the more specific topics belonging to that class, but in the dictionary catalog each subject is treated independently, without regard to its relation to a class. The general book on *Botany* is under that word, and the book on *Flowers* is separated from it by all the words filing between the letters B and F. *Roses* are under R, *Trees* are under T, and while all topics are related by means of cross-references, no attempt is made to keep all of these subjects together under *Botany.* This principle may be stated thus: General books appear in

the catalog under their most specific terms, and books treating of smaller subjects appear likewise under their most specific terms. One looks for books on *Sugar* under this word, and not under *Foods;* a book on *Chairs* appears under that heading, not under *Furniture.* But should the library have a book treating of chairs, tables, and bookcases under one cover, the heading would be *Furniture.*

After the classifier has determined the place the book shall take on the shelves—that is, determined its true subject value —that same subject can often be translated into the term or phrase which will bring it into a like place in the dictionary catalog.

A pitfall must be called to the attention of the student who attempts this translation. It is not a purely mechanical process, because, as has already been stated, the classification scheme takes no account of the alphabetical dictionary catalog. The two systems, cataloging and classification, have very distinctive features. The terms interpreting the symbols in the classification scheme cannot be accepted as the *headings* for the subject cards in the dictionary catalog. The problem of entering under subject in the catalog is an entirely different one from that of classifying the book, and the student must not look upon the classification scheme as a source of *terms;* it only furnishes symbols. We repeat that the subject of the book is constant, but the form by which it is expressed makes or mars the dictionary catalog. In the Decimal classification schedule a book with the symbol 727.1 is called *Schools,* a term applied to the subject of school buildings in the class *Architecture.* The cataloger must take quite a different term to express the same subject. If the term *Schools* is used in the dictionary catalog for such books, it may mean anything from kindergarten to college, or from the question of attendance to a description of the schools of a particular city; there is nothing to limit it to buildings. The catalog must show a more definite term, such as *Schoolhouses.*

The classification is exacting, almost mathematical, in its methods; the problem is to fit the book into a more or less fixed plan. The dictionary catalog is more elastic; more

imagination can be exercised in determining the place the book shall take in its files.

2. Syndetic catalog. While the dictionary catalog is supposed to take no account of logic it has been developed in such a way that many of the *principles* of classification have been introduced. It is not a simple index with no consideration for the grouping of like subjects, nor is it devoid of references which tend to correlate and unify the entries. Mr. Cutter calls it a syndetic catalog, which he defines as follows:

> "Syndetic, connective, applied to that kind of dictionary catalog which binds its entries together by means of cross-references so as to form a whole, the references being made from the most comprehensive subject to those of the next lower degree of comprehensiveness, and from each of these to their subordinate subjects. . . . These cross-references correspond to and are a good substitute for the arrangement in a systematic catalog. References are also made in the syndetic catalog to illustrative and coordinate subjects."[1]

3. Consider books in groups. As in classification, books must be considered in groups. Each book must be linked up with like kinds in the catalog. The cataloger must be sensitive to comparative facts, feelings, and ideas in books. He must get out of them not alone what he can detect through the author's facts but what he himself has acquired in the way of previous learning and experience, and the habits of reflection, comparison, and observation which he has formed. If references are needed to correlate subject entries and unify the catalog, the cataloger will need to become familiar with the logical sequences common to many fields of knowledge. The classification scheme will help him in acquiring that familiarity.

4. Two types of headings—Subject and Form. When classifying books two types were found, those treating of a definite subject or topic, and those written according to a

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[1] Cutter, C. A. Rules for a dictionary catalog. 4th ed. Govt. Print. Off., 1904.

definite form. These two types require the use of both Subject and Form headings in the dictionary catalog.

II. Subject Headings

Having given some idea of what the dictionary catalog aims at accomplishing through its subject entries, the next logical step is to turn to a consideration of the real technique of the dictionary catalog, namely the *choice* of subject headings which will express the content of the books.

This would be a simple matter if a very few books were to be cataloged, but the problem becomes somewhat complex when subject entries for nearly all the books in the library must appear in an alphabetical file with author, title, series, and other entries. The fact that the whole vocabulary of the language is at our command does not make the problem easier. It only emphasizes the importance of careful selection and the necessity of formulating some plan which may regulate this selection, and insure a consistent development as the catalog grows.

1. Choice of terms. It must be stated at the outset that no hard and fast decisions leading to the choice of terms can be made which will apply in all cases. Books are not all alike, and subjects change as the fields of knowledge advance. Experience has led to certain rulings which furnish a few guides useful to the beginner and show the practice of libraries.

Rules for a dictionary catalog, by C. A. Cutter, is the only printed code covering the rulings for subject headings and while this should be referred to by students, their attention should be called to the fact that much of the reasoning used by Cutter was based on that formerly applied to a classified catalog, and that many of the illustrations are out of date.[1]

a. Use terms which represent subjects. In choosing the term to express the subject under which the entry will be filed, one must be mindful of two things: (1) the word or phrase must fit the individual book, and (2) this word or phrase must be one which shall not be limited to one book

[1] This code is mentioned in the next chapter, p. 195.

but shall apply to a group of books covering one field. In other words, it must be a term which shall stand for a subject and not for one book.

The cataloger cannot depend solely upon the book in hand when he is choosing a term to express the subject of that book. To illustrate, today a book entitled *Keramic art* must be cataloged and the heading *Keramics* is chosen; but tomorrow a book entitled *Pottery and porcelain* comes over the cataloger's desk. Shall this be entered under *Pottery* or should it stand with the book of like kind which happens to have Keramic on its title-page? If *Keramics* is used, shall it be spelled with a K or a C, and if *Pottery* is chosen, what will happen to the person who is searching *Keramics* or *Ceramics?* All these three terms are logical, and three different readers may easily approach the catalog with any one of them in mind. Naturally the cataloger cannot scatter the same kind of material in three different places in the alphabet. He must choose the term which is most specific, the most common, the most simple, the one most frequently used in other indexes, and the one which is broad enough to include the various phases of the topic, which in this case is *Pottery.* Under this term he must enter all the books which treat of this subject regardless of the names used on the title-pages, but he must make for the searcher who goes to *Keramics* a reference to *Pottery,* and a similar reference for the person who looks under the term *Ceramics* and *Porcelain.* The references read thus:

Keramics See Pottery
Ceramics See Pottery } Each on a separate card
Porcelain See Pottery

b. Use the most specific term. As a general rule books must be entered under their most specific subject heading. This means the heading which will most accurately fit the book. The term must express the content of the book sharply and accurately, not vaguely and loosely.

A book on wheat does not contain information about other grains; it is limited to the one specific grain which determines its subject heading—*Wheat.*

c. Use common rather than technical terms. Habit being a chief factor in quick reference, it is important that the name of the subject should be that in common usage, that is, the form generally used in common parlance, in printed indexes, encyclopedias, and other reference guides. Probably ninety per cent of the users of a dictionary catalog who want to look up the subject of bones would go to that word. Osteology has practically the same meaning, but it is not a term in common usage and would be looked for only by the specialist. To provide for the few persons who would look under the scientific term rather than the common one, a reference is made which in this case would read: *Osteology See Bones.*

d. Use plural rather than singular terms. The plural form is usually adopted for the subject heading. It is inclusive; e.g., *Canal* might mean one canal, as the Panama Canal, but as soon as *Canals* is used all phases of the subject including the commercial, engineering, and transportation treatises may be entered under this heading. Singular and plural may both be necessary if the two forms of the word have a different meaning, as *Theater* and *Theaters.*

e. Use terms which express correct point of view. Books must not appear under headings which do not express their correct point of view. One might think, for example, that all books treating of psychology could be grouped under this term. They may be in the very small library, but the larger library will find it necessary to consider the subject in its many applications. For example, psychology when applied to medicine takes on a new name; it is known as *Pathological psychology,* and the reader is quite justified in expecting to find this term in the catalog.

f. Use inverted headings. A problem arises if a term such as Pathological psychology is used, however. The general group Psychology is going to lose all the books which treat of this subject in its application to medicine, because the two groups will not file together. In a case of this kind the term may be changed to bring the new subject into relation with the main group to which it belongs; in other words, a term must be found which will allow the special application of

the subject to alphabet with the main subject. Such headings are called "inverted headings"; they are adopted when it seems desirable to keep classes together and so preserve a somewhat logical arrangement. In this case *Psychology, Pathological* can be used. A reference is made from *Pathological psychology* for the reader who knows this term, to the heading chosen.

A number of very good reasons for grouping the various aspects of a question together in the dictionary catalog warrant the use of these inverted headings. Such an arrangement (1) brings all books on every phase of one subject together, (2) frequently gives a grouping different from the classification on the shelves, and (3) relieves the readers of the fatigue and the trouble of searching in several places in the catalog to find related topics. This division of topics to show different phases of treatment is dependent on the size of the collection. A small library having two or three books could keep these under the heading *Psychology* and make a "see" reference from the other term. The general heading would then include books on psychology and its various applications. Each entry in this small group in the catalog could be quickly scanned and titles would differentiate the books for the reader.

Inverted *phrase* headings should usually be avoided, such as *Furniture, History of.* The qualifying word should be used as a subdivision in this case, as *Furniture—History.*

g. Use combined terms. Terms are combined into a compound heading to be used for books covering two phases of a subject so closely allied that one is rarely discussed without the other, e.g., *Flour and flour mills; Dyes and dyeing; Clocks and watches; Manners and customs.*

Reference should always be made from the second part of the heading to the one chosen, as *Watches See Clocks and watches.*

h. Use phrase as heading. A phrase is used as a heading only when the subject cannot be expressed correctly by a noun, as *Women in industry; Japanese in the United States; Strength of materials.*

i. Use definitions for terms chosen. If a dependable catalog

is to be made, the cataloger must define for the use of his assistants those selected terms which are possible of several interpretations. There is every chance that different assistants may construe the same heading to include books quite different in content unless an official file of definitions is at hand. For example, the phrase *Photography, Aerial* might easily be used incorrectly unless the following definition is recorded to show its scope: "Photography from high buildings, balloons, etc.; bird's eye views." There is little danger of a work covering other kinds of photography being placed under this caption if this definition is followed.

The library will have books on clothing and dress, and also on costume. These terms may be easily confused unless a definition shows just what type of book the library has decided to enter in each group. For example, *Costume* is used for descriptive and historical works on modes or costumes of dress among various nations and at different periods, including styles peculiar to particular professions or classes of people or to a particular character; also for works on fancy costume and dress for special occasions, e.g., court receptions, carnivals, masquerades, etc.

For general works treating the subject from the standpoint of utility and for works on the art of dress the combined heading *Clothing and dress* is used.

Such definitions should be filed in the catalog department for official guidance. The fact that the cataloger must formulate these definitions brings to light certain references which might not be suggested if the terms were not analyzed and the definitions stated. The above example brings out as references: *Fancy dress See Costume; Dress See Clothing and dress,* and many others.

(1) *Definition as a part of the heading.* If the same term has two or more meanings, it is necessary to include as a part of the caption the word or phrase which defines the term. Unless this is done the two terms cannot be separately filed. *Masks* (*for the face*) and *Masks* (*Plays*) are two quite different subjects, and must be distinguished both for filing and for defining the difference in use. In this case also it must

not be forgotten that someone will look for *Masques* instead of *Masks.* Words variously spelled must have references from the form not used to the one accepted.

(2) *Defining disputable terms for the reader.* At times it is valuable to give definitions to readers who use the catalog, so that they may know just why certain books are entered under a certain heading and why others are omitted. Such a case is illustrated under the two headings *Anglo-Saxons,* and *Anglo-Saxon race,* as used by the Library of Congress: "*Anglo-Saxon race* is used for works on the nations of Anglo-Saxon descent," and the heading "*Anglo-Saxons* is used for works on the Anglo-Saxons until the time of the conquest (approximately)."

2. Choice between headings.

a. Place vs. Subject. There has always been more or less disagreement about the relative value of the subject and place heading for those books which treat a subject limited to a certain region, as *Birds of North America.* Fortunately the decisions made by the Library of Congress when beginning their dictionary catalog several years ago are now before us. These will naturally tend to settle the question, or at least bring many libraries into agreement on this point. Their rulings may be summed up briefly as follows:

(1) *Subject subdivided by countries.* Use subject subdivided by country for scientific and technical headings, also most economic and education topics, e.g.,

Mines and mining—Germany
Agriculture—England
Botany—U. S.
Trade unions—U. S.
Education—Norway

(2) *Country subdivided by subject.* Use country subdivided by subject for historical and descriptive subjects together with the political, administrative, and social headings, e.g.,

Spain—History
Italy—Description and travel
U. S.—Diplomatic and consular service

U. S.—Army
France—Social life and customs

As there are numerous subjects nearly on the border line, absolute consistency in decisions cannot always be preserved. Occasionally the Library of Congress decision has been influenced by a desire to supplement the classification; in other words, arrangement under place is used merely because the book has already been classified on the shelves by subject without regard to place.

(3) *Cities subdivided by subjects.* Cities may be subdivided by subject if there is a great deal of material about one city, otherwise the subdivision is unnecessary.

The most used subdivisions under cities are Bibliography; Biography; Description; History; and classes of institutions, as Churches, Theaters, Libraries, and Hospitals.

(4) *Local history collections.* It may be needless to say that all books treating of local material of interest to the local library should be entered in the catalog under the name of the place subdivided by subject, e.g.,

Cleveland—Art
Cleveland—Churches
Cleveland—Geology
Cleveland—History

(5) *Regional groups are not kept complete.* The hope of bringing together in the catalog all the books bearing on a special region under that place has long since been abandoned. It would mean much duplication and would be too infrequently used to warrant the expense involved. The only way to provide a geographical approach is to make reference from the place to the subject under which regional material is listed, as, *U. S.—Botany See Botany—U. S.; and, Army—U. S. See U. S.—Army.*

b. Persons as subjects. A person may be the subject as well as an author of a work. Such biographical and critical studies should be made to file with the same name as author. A biography of Tennyson is entered under *Tennyson* as subject, and an autobiography of Carlyle is entered under *Carlyle* as author and under *Carlyle* as subject; in this case the author

and the subject are one and the same person. A criticism of Browning's works as a whole would be entered under *Browning, Robert—Criticism,* and a criticism of his *Ring and the book,* being a critical study of an individual work, is entered under *Browning, Robert. Ring and the book,* so that it will be filed with the very book under discussion. The personal name as subject heading must take exactly the same form and fulness as that adopted for author entry, so that the two will file together.

3. Subdivision of headings.

a. By subject. The tendency to group under one heading all the books covering one field is desirable up to a certain point, but such procedure will lead to a day of reckoning when the entries under one caption become so numerous that it is difficult to differentiate between titles. When this happens the subject must be subdivided. For example, if there are thirty-five or fifty cards under *Drama,* the cataloger should go over them carefully, selecting all those treating the history and criticism of the drama, the technique of the drama, and other special phases, and segregate them from the general books. The headings would then read:

Drama
Drama—History and criticism
Drama—19th century
Drama—Technique

When the average public library reaches the 50,000 volume mark, subject headings demand more attention than at any other time, because many of the broad headings begin to need expansion as new additions are made in the book collection. A new book, for example, on the subject of drama in the nineteenth century may be more useful if set apart under this heading, in which case all titles under the heading *Drama* must be examined to discover those which may treat of the same subject. Unless this is done, the assistant or reader who consults the heading *Drama—19th century* will find only one book, whereas the library actually has four or five, buried under the heading *Drama.* As every new heading is accepted the cataloger must go back and collect the old titles which

should now be grouped with the new titles under a new caption. The work constantly demands that the cataloger take two steps forward and one back if the catalog is to be alive and progressive. This is one of the reasons why cataloging often seems slow to the uninitiated; they do not realize that the catalog is constantly in need of readjustment and that new and different subjects must be correlated with all that has gone before.

b. By form. Form subdivisions are usually similar to those found in any system of classification. They may be used under any subject where it is necessary to subdivide. The most common are:

> Addresses, essays, lectures.—Bibliography.—Biography.—Collected works.—Collections.—Dictionaries.—Directories.—Drama.—Fiction.—Handbooks, manuals, etc.—History.—Outlines, syllabi, etc.—Periodicals.—Poetry.—Statistics.—Stories.—Study and teaching.

Since readers may look for all dictionaries, for example, under this word, a reference must be made to show how these are entered in the catalog. This is what is called a *general reference* or *information entry*. It does not refer to any definite subject or books, but merely shows the reader what policy is followed in entering books written in a certain form. Example:

> *Dictionaries*
>
> For dictionaries of a special language or subject. See names of language or subject, subdivision Dictionaries, e.g., *English language—Dictionaries; Chemistry—Dictionaries.*

Should the library possess a book on *How to compile a dictionary* it would have to be listed under the subject *Dictionaries*. Many form headings will have to be used as main subject entries as well as subdivisions under subject.

c. By period. History headings under place are again subdivided by period if there are many cards with these headings. These subdivisions may be expressed by events, or by definite dates, e.g.,

France—History—Revolution, 1789–1799
U. S.—History—1783–1865
U. S.—History—Civil war

This gives a chronological arrangement under the history group.

References should be made from any subdivision having a distinctive name, as, *French revolution See France—History —Revolution.*

Some subjects are definitely limited by time, as illustrated by *Art, Ancient; Philosophy, Modern;* and *Civilization, Medieval.* The beginner should use such headings only after checking them with a printed list of headings. They are not used except with subjects which lend themselves to such treatment. A book on modern methods of heating houses would not take the heading *Heating, Modern.* What is modern today may be out of date in a year or two.

III. Form Headings

Form headings should not be confused with form divisions under subject. As used here the Form headings are of equal importance to the subject headings; they group together entries for books having other than subject use.

1. For books having a definite use. There is a demand for certain groups of books having a special use. Such headings are illustrated by *Readers and speakers; Debates and debating;* and *Scientific recreations.* These headings are not illustrative of the subject of the books but rather of their adaptability to a special need. Headings of this type must be chosen with discretion; in fact, they should be limited to those given in the printed lists of subject headings mentioned in the following chapter.

Debates and debating is used to include subject books on debating which cannot be given either the heading *Oratory,* or *Parliamentary practice,* as well as books covering topics worked out for debate, as those in the Debater's handbook series.

2. For literature. Some readers wish to know what books the library has in literary forms like poetry, drama,

essays, wit and humor, written by individual authors. These books have little or no subject value, but they may be grouped together under form to allow the reader to see what the library has by English poets, French poets, German dramatists, English dramatists, etc. When introduced in the dictionary catalog these groups usually duplicate the arrangement of the cards in the shelf-list and the books on the shelves. For this reason most libraries do not feel warranted in filling up the dictionary catalog with such entries. The patrons of the small libraries having access to the shelves would prefer to make their selection by looking over the books, and the large library not giving access to shelves would find these classes so bulky in the dictionary catalog that they would doubtless prefer to answer questions from the shelf-list. Their omission from the catalog is not serious, since such books are most frequently wanted because of their authors. One usually reads poetry and drama, not to exhaust the collection, but to satisfy a desire to know the work of a certain writer; therefore the author entry is the most important one in cataloging these books.

Individual works in literature. Since *form* entry for individual works by poets, dramatists, essayists, etc., is seldom used, these appear in the catalog only (1) under author, and (2) under title when necessary, e.g., Edwin Arlington Robinson's *The man who died twice* would not have the heading American poetry, but would have author and title entry only in the dictionary catalog.

Collections. Form headings may be given to collections of poetry, drama, and other forms of literature which cannot be found easily under author entry in the catalog since their compilers are frequently little known. If the collection is not limited to writers of any one nationality, the heading becomes, for example, *Poetry—Collections,* but if the book is made up of poems by English writers, the heading becomes *English poetry—Collections.* The small library would need but one heading, *Poetry—Collections.*

Collections of poetry limited by type may be given form headings, as, *Religious poetry, Patriotic poetry,* etc.

Fiction in the dictionary catalog. Novels and short stories

of a certain type or kind may be grouped together in a dictionary catalog, so that the reader may choose *Sea stories, College stories,* etc. These headings take their places in the regular alphabetical file along with the subject entries.

Historical novels are often useful because of their subject value. These may go into the dictionary catalog by using the same subject heading as that used for the fact books and adding the subdivision *Fiction,* as *France—History—Fiction,* or *U. S. History—Civil War—Fiction.* The subject heading *Historical fiction* is used for works about historical fiction.

Rarer literatures and languages. Books in the rarer languages or literatures may be grouped together, irrespective of their subject or form value, under the name of the language, as *Japanese language—Texts* (for single works), and *Japanese language—Collections* (for compilations). In such cases the language value may be more important than the subject treated, and by this method all the books in the language and about the language are brought together in the catalog.

IV. Subject Cross-References

Subject references in a dictionary catalog are of two kinds, (1) those referring from one term or name under which no books are entered to a term or name under which books are entered, and (2) those referring from one term under which books are entered to another related term where books are also entered.

The first kind, commonly called "see" references, have been used throughout these chapters when illustrations demanded their use. They should be generously made.

The second kind, commonly called "see also" references are not needed until there is enough subject material in the catalog to require correlating.

These "see also" references are made to call attention to subjects which may further help the reader in finding additional material on the subject he is looking up. They introduce an element of logic into the dictionary catalog by suggesting related topics.

It is almost impossible to make rules for the use of "see

also" references. The thing to remember is the purpose of such references. They must be made as judgment dictates, and the cataloger must constantly draw on his knowledge of classification as well as his information of subjects.

It is wise for the beginner to conform to the printed lists of subject headings which are described in the next chapter, but the suggestions found there should not be accepted without thought and consideration. It is only by analyzing the whys and wherefores of these suggested references that one comes to understand their use.

1. References from specific to general terms. One rule which is generally followed is to refer from a larger to a smaller subject, but not back from the smaller to the larger; e.g., one would refer from *Grain* to *Wheat,* but not from *Wheat* to *Grain.* Such references leave something to be desired in the dictionary catalog and one sees at once that the reader's attack in using the catalog is direct, *provided he knows exactly what he wants.* The following just criticism of the catalog has been made on this score by J. H. Quinn:

> "If the library has no book or article sufficiently important to be cataloged on that [specific] topic, he must look in some more comprehensive work in which he will find it treated (as the history of Assyrian art is related in the [general] histories of Art), in which case he will get no help whatever from any dictionary catalog yet made, in finding the general work; he must trust to his own knowledge of the subject and of ordinary classification to guide him to the including class."[1]

This statement may be amplified by an example: The boy who wants something on glaciers may find nothing in the card catalog under this subject because the library has no single book on the subject, nor has it analyzed parts of books treating on the topic. He is unaware of the fact that most titles listed under the heading *Geology* will have chapters on glaciers, and he goes away from the library without being able to discover the book which will help him.

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[1] Quinn, J. H. Library cataloguing. Truslove & Hanson, 1913, p. 26.

There has been much discussion as to the wisdom of referring a reader from a smaller to a larger subject by means of "see also" references. There are those who argue that the titles entered under the general subject cannot possibly give as satisfactory information on the specific subject as can be given in the book devoted to the specific subject alone. In other words, a book on glaciers would be more complete than a chapter on this subject treated in a work on geology. This is probably true, all things being equal, but if the general book is of later date, it can furnish later and even better information than the specific book, or if it is treated by a greater authority it will have more weight. The way to make the best use of the specific information in the general book is to make an analytic for the chapter or part treating of the smaller subject, but many libraries cannot afford to do such minute work.

Analytics, however, do not answer the question of showing the reader where he will find the general books entered. Some libraries have met this need by a *general information reference card.* Such a card has been successfully used where many analytics were desirable, but where the work entailed in making them seemed insurmountable. The card reads thus—

Glaciers

Chapters on this subject will often be found in the books entered in this catalog under the heading *Geology.*

A printed form can be used, to which the headings, *Glaciers* and *Geology,* can be added and a quick reference card is available. Since this card refers to no definite book it can remain in the catalog indefinitely, or until the general heading is withdrawn. The best guides to aid one in making these references are the *general* books themselves, and any good system of classification.

These information cards are useful both in branch library catalogs, school library catalogs, and in small library catalogs where the general books must be made to yield their full contents. They are really indefinite analytical reference cards and serve to furnish a guide which, Mr. Quinn suggests, is wanting in the dictionary catalog. The large library could use the same

method, but since a larger collection would usually have definite books treating the specific subject such a card would not be so necessary.

2. **When to make "see also" cards.** Logically "see also" references should not be made from subjects under which no books are entered, e.g., if the library had no books under the subject heading *Building materials,* but did have some under the heading *Concrete,* it might seem somewhat incongruous to tell the reader who looks under the heading *Building materials* to see also *Concrete,* but as a matter of practical use it is better to misuse the word "also" than to have the reader lose a reference to the books on Concrete because he happened to begin his search with the heading *Building materials.* If

Diplomacy, see also
Consuls; Diplomatic and consular service; Diplomats.

or

Diplomacy.
Material on this subject will also be found under
Consuls; Diplomatic and consular service; Diplomats.

Two forms for "see also" reference cards.

these references are made as soon as new headings are chosen, there is less danger of the cataloger's neglecting to make them later.

Two forms of "see also" reference cards are now in use. The first example given on page 190 is brief and direct, while the second is more explanatory and may, therefore, be more easily understood by the users of the catalog.

For directions for checking references in the Sears list of subject headings, see the next chapter.

V. Number of Headings for One Book

The student has already observed that the catalog can list books under any number of subject headings. A book on travel in Norway, Denmark, and Sweden would be entered in the dictionary catalog under each of these countries, and a book on gold mining in Colorado would appear under the heading *Gold mines and mining* and also under *Mines and mining—Colorado.* The book *The language and thought of the child* by Jean Piaget would have the headings *Child study* and also *Language and languages.*

Theory and application are often treated in one book and if the emphasis is equal the two subjects should appear in the catalog. This is illustrated by *Foundations of bridges;* this book contributes to the theory of foundation work and also to the subject of bridges. The subject headings are (1) *Foundations,* (2) *Bridges.* The book *Psychological tests of musical talents* is another which contributes to two quite different fields: (1) *Music—Psychology, and* (2) *Mental tests.*

Certain books have a direct application to a place and also have a specific subject value apart from the place. *Romanesque architecture in France* is a work of this kind. It is valuable as a contribution to *Architecture, Romanesque,* quite independent of its application to *France,* but it is also useful to the person who wants a book on architecture of France. Here the book should be given the two subject headings: *Architecture, Romanesque,* and *Architecture—France.*

Do not use too many headings for one book. Caution must be exercised against multiplying headings unnecessarily. The

beginner is tempted to give too many headings and so overload the catalog with subject entries which give inaccurate leads to books and which are of little use.

A list of "don'ts" may help one to avoid such errors:

1. Don't enter under both subject and form.
   e. g. Essays on astronomy. Enter under Astronomy only, *not* under Essays.
2. Don't enter under place *and* subject when the subject does not lend itself to local treatment.
   e. g. Researches in the field of radio made in Germany. Enter under Radio only, *not* under Germany.
3. Don't enter a book of definite scope under the larger as well as the specific term.
   e. g. Natural history as studied through bird life. Enter under Birds only, *not* under Natural history.
4. Don't enter under subject and also under the type of reader for whom the book was prepared.
   e. g. Banking for women. Enter under Banks and banking only, *not* under Women.
5. Don't enter under events taking place in a certain locality under the event and also the place.
   e. g. Olympic games in France. Enter under Olympic games only, *not* France.

VI. Subject Analytics

The kind and size of the library must influence one in the number of analytical entries to be made. Special libraries, school libraries, and small libraries will need to get the most out of every book. They must frequently serve a number of persons at one time, all of whom are demanding the same topic. The only way to be ready to meet such an attack on the catalog is to analyze every book which has information bearing on the topic and likely to be in demand. A school library is certainly warranted in making many analytics.

Books treating of a variety of topics, or of subjects which can be divided into definite topics should generally be analyzed. Such books include:

1. Collective biography
2. History and description of special places
3. Collections of essays having subject value
4. Natural histories giving independent chapters to birds, fishes, etc.

5. Collections of holiday material
6. General descriptive books including some definite specific subjects, as, a book on forestry will have a chapter on Arbor day; a book on mining in South Africa will have a chapter on Diamonds; a book on the industries will have chapters on the specific industries which will be useful in a catalog for children

As the library increases in size the number of subject analytics will probably become less, because whole books will be found which will be more satisfactory than parts of a more general book. Demand will be a large factor in deciding how many and what subject analytics to make. Here again it is use which will help in making decisions.

Analyticals in large library catalogs will in most cases be limited to monographs contained in series, and important articles contained in the transactions of learned and scientific societies.

VII. Conclusion

This brief survey of a large subject has attempted only to give some slight understanding of the purpose of the dictionary catalog, and to touch upon a few of the problems involved in the selection of subject headings. As has already been said, it is difficult to formulate fixed rules for subject entry in an alphabetical file, but as one works with books some principles will be recognized and then policies can be formulated.

A study of dictionary catalogs already in use, either in card or book form will be helpful. Some of the book catalogs mentioned in the next chapter contain valuable forewords in which the principles followed in making the catalog are set forth.

To those who would actually catalog books in order to become more familiar with dictionary catalog problems, it is suggested that books be selected from one class, as Architecture, Sociology, History. A group limited to one subject will show the shades of meaning between subjects and furnish related headings which can be correlated by references.

The following chapter should be read before any practical

work is attempted, since it suggests guides to aid one in the selection of terms.

References and Thought Questions

The references and thought questions for this chapter have been combined with those covering Chapter X and will be found at the end of that chapter.

Chapter X

The Dictionary Catalog, Aids in the Choice of Headings; Official Records

I. Dictionary Catalogs in Book Form

II. Printed Lists of Subject Headings
1. A.L.A. list
2. Sears list
3. Library of Congress subject headings
4. Value of subject heading lists
5. Selection of terms from a printed list
6. Changing headings to conform to a printed list

III. Official Records of Subject Headings
1. Checked book list
2. Card list of headings
3. List of headings in the catalog
4. List of subdivisions of subjects

IV. Other Guides to Subject Headings
1. Bibliographies
2. Subject indexes to library catalogs
3. A.L.A. catalogs
4. Booklist
5. General indexes
6. Commercial indexes
7. Printed lists of headings for special subjects

The last chapter may have left the student with a mind perplexed with more or less doubt as to just how order could come out of a catalog made up of such a multiplicity of entries, as is that of the dictionary type. Therefore, we shall here consider some of the aids to be used in the preparation of this catalog.

We naturally turn to printed catalogs and bibliographical guides because they have served in a similar or analogous case, and because we realize the advantages to be gained in making our tool uniform with other guides.

Rules for a dictionary catalog, compiled by C. A. Cutter, was the first American code of catalog rules to receive uni-

versal recognition. It was issued as part 2 of the U. S. Bureau of Education *Special report on public libraries in 1876.* A second enlarged edition was issued in 1889, a third with additions and corrections and an alphabetical index, in 1891, and the fourth edition in rewritten form was published in 1904. It has been issued as a separate and may be secured from the Superintendent of Documents at Washington.

This is the only code which attempts to cover the dictionary catalog as a whole. Rules for the author, title, and subject catalogs are included, and the reason for each rule is stated. The section devoted to the choice of subject headings is the best, and in fact the only, exposition of the subject so far printed.

Mr. Cutter looked into the future when he revised his code which was printed in 1904. In that edition (4th) he says:

> "In the last two years a great change has come upon the status of cataloging in the United States. The Library of Congress has begun furnishing its printed catalog cards on such liberal terms that any new library would be very foolish not to make its catalog mainly of them, and the older libraries find them a valuable assistance in the cataloging of their accessions, not so much because they are cheaper as because in the case of most libraries they are better than the library is likely to make for itself.
>
> "The differences between these rules [Cutter's] and those adopted by the Library of Congress are of two classes. The first class of differences is in trifles of punctuation, capitalization, the place of certain items on the cards, and the like. If one already has a catalog with a large number of cards, and merely inserts in it as many of the Library of Congress cards as possible, I see no reason for altering one's own style, either on the past accumulations or on the new cards that one is to write. The two kinds of cards can stand together in the drawers and the public will never notice the difference. But if one is commencing a new catalog, to be composed mainly of Library of Congress cards, I advise following the Library of Congress rules closely. It will save much trouble.

"In the second class of differences, those relating to place of entry of the card in the catalog, or of choice of heading, we must note that it is very easy to alter the entry of a Library of Congress card, as there is room enough above the heading on the printed card to write in the one preferred. A librarian who already has a large catalog will therefore find no difficulty in continuing his present heading, and need change only if he thinks the Library of Congress practice better. Nevertheless, as it is some trouble to look for differences of practice, and there is always a chance of overlooking one and so getting different entries for similar books, it would be well to adopt the Library of Congress rules unless there is some decided reason against them. The librarian who is just commencing his catalog has still more reason for this course."[1]

I. Dictionary Catalogs in Book Form

The dictionary book catalogs of other libraries furnished the first printed suggestions for subject headings. There were three unusually good catalogs of the dictionary type upon which much of the early work was based: the first, compiled by C. A. Cutter, author of the *Rules for a dictionary catalog,* was that of the catalog of the library of the Boston Athenaeum, Boston (1874–1882); the second, the catalog of the Peabody Institute of Baltimore, printed in 1883–1892 with supplementary volumes issued in 1899–1905; and the third, the *Index catalogue of the library, authors, and subjects, of the U. S. Surgeon-general's office,* 1880–1895, 16 v. Second series 1896–1915, 21 v., and Third series, 1918–1928, v. 1–7. These catalogs are even today three of the best bibliographical aids, valuable not only to catalogers, but also to reference librarians. The excellent choice of headings and the references correlating related topics make them useful for all students of library science.

II. Printed Lists of Subject Headings

While the dictionary catalogs described above served the large library, a demand soon came for a more simple list of

[1] Cutter, C. A. Rules for a dictionary catalog. 4th ed. Govt. Print. Off., 1904, p. 5–6.

subject headings which would answer the needs of the smaller libraries. As a result, in 1892 a committee of the American Library Association was appointed for the purpose of collecting catalogs and compiling from them a list of subject headings which should represent the most approved usage. The result of this work was printed by the American Library Association in 1895.

1. A.L.A. list.[1] This list, commonly called the *A.L.A. list,* was an array of terms only. Because no books were listed, it lacked much of the value of the catalogs mentioned above. It was, however, soon accepted by libraries and became a valuable tool in standardizing headings and in bringing uniformity into dictionary catalogs. References were included. Three editions were issued; the last, in 1911, was a volume of 398 pages. Unfortunately the list is now (1929) out of print.

2. Sears list. The American Library Association, on the recommendation of the Committee on Cataloging of that association, decided not to reprint the *A.L.A. list* but to recommend the adoption of two works of a more recent date already available, and conforming to Library of Congress practice. The most recent of these is the *List of subject headings for small libraries compiled from lists used in nine representative small libraries,* compiled by Minnie E. Sears and published by the H. W. Wilson Company. Two editions were issued, the first in 1923 and the second in 1926. The second edition should be adopted, since it contains many additions and changes. The most important addition is the list of "see also" references, which had been omitted from the edition of 1923.

Fortunately the headings have been made to conform to Library of Congress practice as far as possible, making it easy for the small library using the Sears compilation to grow into the use of Library of Congress headings as the collection increases and with it the demand for subdivisions and more specific terms. No one should attempt to use the list before

[1]American Library Association. List of subject headings for use in dictionary catalogs. 3d ed. rev. by Mary J. Briggs. Chicago, A.L.A., 1911. o. p.

making a study of the Introduction, which contains a clear statement of its purpose, its extent, and its use as related to the more elaborate headings of the Library of Congress. This foreword will assist the cataloger in formulating policies not only in the use of the list, but also in its extension. The cataloger in the small library will find this list an excellent tool and one easily kept up to date by inserting new headings on the blank half of each page.

While the general plan is the same as that followed in the *A.L.A. list,* there have been changes in terms which make it difficult for libraries accustomed to the A.L.A. headings to adopt the terms in the Sears volume.

Libraries making use of Library of Congress printed cards will find Sears list much more adaptable to a catalog made up of these cards than was the *A.L.A. list.* The method of checking this list is explained farther on in this chapter.

The question of changing headings already incorporated in the local library catalog to conform to a new list of subject headings will be taken up later in this chapter.

3. Library of Congress subject headings.

a. Use by other libraries. The headings printed by the Library of Congress differ from the *A.L.A. list* in many cases, and are unlike the Sears terms in some few cases. The fact that the headings are chosen primarily from the dictionary catalog of the Library of Congress is very important. Any schedule of headings compiled for the use of so large a library cannot be copied verbatim by another library. It would be unwise in a library of 50,000 volumes, for example, to adopt the same subdivisions as the Library of Congress finds necessary in cataloging its collection of over 3,000,000 volumes. Each cataloger must know his own problems and make such use of the Library of Congress helps as will fit into his own scheme; he must realize that his catalog and that of the Library of Congress may be very different. There is great danger in following any tool not giving rules for its use; especially is this true when dealing with thousands of terms which may or may not stand for the subject of which the book in hand treats. Just as much judgment and care are

needed in using the list of subject headings as are required in determining the subject of the book. A term incorrectly interpreted and chosen may place the book quite out of its real place and give erroneous information as to its contents. It is only just to the Library of Congress to repeat the statement that the terms were not chosen with the needs of other libraries in mind; therefore it is suggestive only to those catalogers who can use it with intelligence and who do not expect to find in it a ready-made tool which will fit every case.

b. Scope. The Library of Congress began printing its subject headings in 1909. The list is inclusive in character, covering all branches of knowledge as far as headings for these have been adopted in the Library of Congress. The names of persons are, however, omitted, also names of societies, institutions, and bodies of various kinds, names of treaties and conventions, and systematic names of genera and species in botany and zoology.

c. Subdivisions of subjects. Ordinarily only those subdivisions under subjects are printed in the list which are distinctive, or peculiar to that subject, while general form subdivisions, such as directories, periodicals, and societies, which may properly be used under any subject requiring them, are as a rule omitted here but are included in the Library of Congress pamphlet, *Subject subdivisions,* p. 23–24.[1] Form divisions are sometimes defined in the list of L. C. subject headings. Subdivisions under countries include the history periods only, but the Library of Congress has issued the complete list of these in a separate pamphlet which is mentioned later in this chapter.

d. References. Where practicable, references are made from the most inclusive to somewhat more limited subjects, and from these latter to subjects still more specific, rather than from the inclusive to the most specific subjects. For example, reference is made from *Art* to *Engraving,* and from *Engraving* to *Stipple-Engraving.* Unfortunately the list does not indicate *from* what subjects references have been made. For

[1] See p. 202 of this text.

example, a reference to *Accidents* will show what other subjects one must also consult, but there is no list showing what references have been made *to* the heading *Accidents* from other subjects, as is shown in the Sears and A.L.A. lists. In other words, the "see also" references are indicated in the L. C. list, but the "refer from" references are not indicated. It is rather unfortunate that the "refer from" references are not included; they are not only suggestive in such a list, but are most useful if the list is checked and kept as an official guide.

References are freely made from synonymous terms, transposed terms, etc. Definitions of terms are given in many cases, but more of these would add great value to the list.

e. Classification symbol. In many cases the L. C. classification symbols follow the subject headings, indicating where the books dealing with those subjects are classified in the Library of Congress. An explanatory word following these symbols serves to guide those interested in the classification scheme, but it should be noted that these terms are in different form from the subject headings, and should not be confused with them.

f. Index to the classification. As was stated in the chapter on the Library of Congress Classification, this list of subject headings furnishes a general alphabetical index to all classes of the Library of Congress classification system, by giving the classification symbol mentioned above.

g. Editions. For a list of the various editions of the *List of subject headings* issued by the Library of Congress, one should read the statement made by Mary E. Hyde before the Boston group of catalogers in 1925.[1] The editions listed in this text are those now (1929) available. They may be purchased from the Library of Congress. All lists printed prior to the publication of the following editions are superseded by the editions noted here.

Complete edition.

U. S. Library of Congress. Catalog division.
Subject headings used in the dictionary catalogues of the

[1] Boston catalogers discuss subject headings. Library Journal 50: 493–95. June 1, 1925.

Library of Congress. 3d ed. Washington, Govt. Print. Off., 1928. 1535p.
This edition incorporates additions and changes to December 31, 1927.

List of additions and changes supplied each month. Slips containing lists of additions and changes for the third edition of the list are now (1929) supplied monthly, excepting months during which there are too few to justify the printing of a slip by the Library of Congress. They are printed on one side only, in a form adapted to the space into which they are to fit, and are supplied on card stock or thin gummed paper, according to preference. These slip lists will be kept in stock until the fourth edition of the list is issued.

h. L. C. Special lists of subject headings issued in pamphlet form.

These lists are to be used as supplements to the complete edition.

U. S. Library of Congress. Catalog division.
Subject subdivisions: (A) under names of countries, states, etc., (B) under names of cities, (C) under general subjects. 6th ed. Govt. Print. Off., 1924.
Incorporates all subject subdivisions to August, 1924.

U. S. Library of Congress. Catalog division.
Subject headings with local subdivision: (A) headings with indirect subdivision, (B) headings with direct subdivision, and (C) list of local divisions (states, provinces, etc.) to which subdivision is always direct. 4th ed. Govt. Print. Off., 1925.

U. S. Library of Congress. Catalog division.
Literature subject headings and language subject headings, with list for Shakespeare collections, and Language headings. 5th ed. Govt. Print. Off., 1926.

i. Subject headings on printed catalog cards. The latest headings, and the latest decisions concerning headings and changed headings, are also to be found on the L. C. catalog cards. Not only must new headings on these cards be caught, but also new subdivisions of subjects. New topics often appear which have formerly been included in a more general term, as *Junior high school,* which was taken out of the general heading *High schools.*

4. Value of subject heading lists. It is always difficult for a library to change the headings in its dictionary catalog;

for this reason it is rather unfortunate that the list (A.L.A.) formerly printed and adopted is now out of print, making it necessary in some cases to adopt a new, and in many ways a different, schedule, but such changes are certain to arise when library work is in a formative state. The *A.L.A. list* was compiled before the Library of Congress printed cards came into general use, and before any real attempt had been made to unify the work of subject headings for library catalogs. Much has been learned since that time and many new terms have been added to the vocabulary; therefore a new, up-to-date list of headings would be welcomed.

Like many other technical phases of library work, the assignment of subject headings has been altered by the co-operation offered by the Library of Congress. The fact that a cumulative list is now being compiled by that Library is fixing the standards for catalogs all over the world, and libraries are assured that up-to-date topics will be cared for and that there will probably be no discontinuance of the list so long as the Library of Congress functions.

With the Sears list as a base for the library of average size and the Library of Congress list as an extension for larger collections, the foundation for subject heading work seems more sound than it has ever been. Greater consistency in headings is sure to come out of the use of these interrelated lists, and the cataloger has dependable guides which, because of their uniformity, can be given to assistants transferred from one library to another.

a. Printed lists are suggestive only. No cataloger should be so dependent on a printed list of terms that he has no policy back of the choice of headings for his own individual catalog. Unless there is a definite plan for developing the headings as well as the references for a specific dictionary catalog, it is certain to be thrown into disorder, and to swing out of focus. While all the printed lists are based upon sound logic and definite policies, they cannot be accepted in full by all libraries. The local needs, the age of the catalog, the minuteness of entry, and the use by readers must dictate the policy. The lists can be suggestive only; the same keenness of discernment must

go into their use as goes into their compilation, for in using these lists the cataloger is compiling the headings for his own catalog, selecting only those which suit his needs, and which cover the subjects represented by books in the local library.

5. Selection of terms from a printed list.

a. How to select. When selecting terms after the subject of the book has been settled, the cataloger turns to the list and selects the word which seems best to express that subject; but before accepting the term he will read through all the related headings grouped under the references. A term may be found here which is much more specific and therefore better adapted to his book. For example, assuming that the book is one treating of economic consumption, it may even bear this title; the term in the list for this is *Consumption (Economics)*. But when the references are examined and the term *Prices* catches the eye, a new point of view is suggested. On second consideration the cataloger realizes that the term *Price* most nearly describes the book, for it is this aspect of the subject which is emphasized and treated, not the large subject of economic production. This suggestive element in the lists adds much to their usefulness.

b. Headings taken from printed list should be copied exactly. After a decision has been made to follow a printed list of headings, the exact form should be copied. Use the same punctuation, spelling, and capitalization, unless your catalog has already been made after a different style.

Both the Library of Congress and the Sears lists use the dash between all main headings and the subdivisions of the same heading. The comma is used in inverted headings. A word used to qualify a term is enclosed in curves, and the curves take the place of all punctuation, as *Camps (Military)*.

The following examples will illustrate the different forms of headings which will appear in the catalog:

Noun	Illustrated by	Botany
Compound	"	" Labor and laboring classes
Qualified	"	" Eastern question (Far East) Masks (Plays)
Phrase	"	" Women as authors

Adjective headings	Illustrated by	English language Greek poetry Agricultural credit
Adjective heading inverted	"	" Chemistry, Technical
Subject subdivision	"	" Railroads—Finance European war, 1914–1918—Great Britain
Subject subdivision of place	"	" U. S.—Industries
Form subdivision	"	" Music—Periodicals France—History—Revolution, 1789–1799—Fiction
Period subdivision	"	" U. S.—History—1783–1809 U. S.—History—Civil war

6. Changing headings to conform to a printed list. The selection of subject headings for a new catalog is far less complicated than the choice of new headings for a catalog which is already functioning. As we have learned from the preceding chapter, the chain of interrelated topics in a dictionary catalog is so tied up by references that it is difficult to make changes without disorganizing the whole plan. If the student is beginning a new catalog he has many aids to guide him in the choice of headings and he can, by adopting one of the lists just described, be quite sure of developing a consistent and uniform catalog. If, on the other hand, the problem is one of fitting new subjects into an old catalog, he will find that the headings already in use do not coincide with those suggested in the printed lists and as a result terms do not agree and references are irrelevant.

No fixed rules can be formulated to guide the cataloger in making changes in a catalog started before printed lists of subject headings were available. Much depends upon the number of entries already in the catalog and the importance of the change. Changes in headings mean changes in references, involving often the reprinting or rewriting of many catalog cards as well as the correction of other records, and the average library cannot afford to add such work to that already carried. Headings already in use in the local library may be quite as satisfactory for that special library as those suggested in the printed lists; therefore, when one contem-

plates the change merely for conformity he should weigh its value carefully before he becomes involved in the task of correcting a mass of references and records.

Naturally, obsolete and out-of-date terms which the reader would seldom consult must be changed. For example, the term *Consumption* has been replaced by *Tuberculosis,* and any library would want to adopt the latter term, for the sake of making the catalog more modern and of saving time for the reader, who in ninety-nine cases out of a hundred would look under *Tuberculosis.* A catalog must be kept reasonably modern, but it is often impossible and unwise to change terms when a reference from a new term to the term already in use will answer. For example, *Trade unions* has been recommended by Sears as against *Labor unions* as used in the *A.L.A. list.* The term is probably more modern, but there is little to be gained in listing these books on trade unions with other headings beginning with *Trade;* therefore it would seem much more sensible to make a reference from *Trade unions* to *Labor unions* than to change all the cards filed under the old term.

Every local library will have problems peculiar to its particular collection and no cataloger should ever be afraid of making changes or deviating from a prescribed list of headings when he is acting from sound reason. The following points should be taken into consideration before changing subject headings to conform to terms in printed lists.

1. Number of cards bearing the heading to be changed.
2. Number of references to be changed.
3. Effect the change will have on allied subjects.
   For example, if one changes *Electric currents* to *Currents, Electric,* the books on electric currents will be separated from those on other phases of electricity. Do you want to make this separation?
4. The number of new books the library is likely to receive on this subject.
   For example, if the library has used *Bicycling,* and the Sears list recommends *Cycling,* it will

not pay to change to *Cycling* because few, if any, books on this subject are being issued. The subject is practically dead, and a reference will suffice.

5. The advantage of the change to the user of the catalog. For example, if the library has used *Radio* and some other library has adopted *Telegraph, Wireless,* it is probable that the public library will better serve its readers by retaining the more popular heading. When one realizes that certain headings are transposed in order to keep together large groups like *Telegraphy,* one feels justified in not striving for absolute uniformity.

III. Official Records of Subject Headings

As soon as headings are chosen for the library catalog, they should be recorded to insure consistency in their use, and to furnish all catalogers working on the same catalog with one official key. Such a list is also necessary as a base for the making of references from one subject to another. Various methods have been adopted by libraries for keeping such an official record. Any one of the following may be found useful:

1. Checked book list. It stands to reason that no one library will use all the headings suggested in any printed list except the library for which the list was made; therefore, a checked list must be kept by each library to distinguish those headings adopted for its own catalog.

The following procedure may be followed, using the reproduced sections from the Sears list as an example.

The student will assume that the library already has books on consuls, diplomacy, and diplomats, and that a book on consular service is to be added.

One proceeds as follows in recording the subject heading of the new book:

(a) Determine the subject of the book, e.g., consular service.

(b) Examine the list of headings (p. 208) to determine

√Consular service. See Diplomatic and consular service
√Consulates. See Diplomatic and consular service
√Consuls
See also √Diplomatic and consular service; also subdivision Diplomatic and consular service under names of countries
Refer from (see also ref.) √Diplomacy; √Diplomatic and consular service; √Diplomats; √International law and relations
Consumers' leagues
Refer from (see also ref.) Clothing trade; Labor and laboring classes; Sweating system
Consumption. See Tuberculosis
Dinners and dining
See also Cookery; Desserts; Food; Menus; Table
Refer from (see ref.) Banquets; Eating; Gastronomy
Refer from (see also ref.) Cookery; Entertaining; Etiquet; Food; Menus; Table
Dinosauria
Dioptrics. See Refraction
Diphtheria
Refer from (see also ref.) Children—Diseases; Diseases
√Diplomacy
See also Ambassadors; √Consuls; √Diplomatic and consular service; √Diplomats; International law and relations; Treaties; also subdivision Foreign relations under names of countries (e.g., U.S.—Foreign relations)
Refer from (see also ref.) √Diplomatic and consular service; √History; √International law and relations
√Diplomatic and consular service
See also Ambassadors; √Con-

Copy of sections of pages 91 and 109 from Sears. List of subject headings for small libraries. Wilson, 1926.

suls; √Diplomacy; √Diplomats; International law and relations; also subdivision Diplomatic and consular service under names of countries (e.g., U. S.—Diplomatic and consular service)
Refer from (see ref.) √Consular service; √Consulates; √Legations
Refer from (see also ref.) √Ambassadors; √Consuls; √Diplomacy; √Diplomats; √International law and relations

√Diplomats
See also Ambassadors; √Consuls; √Diplomatic and consular service
Refer from (see also ref.) √Diplomacy; √Diplomatic and consular service.

Copy of sections of pages 91 and 109 from Sears. List of subject headings for small libraries. Wilson, 1926.

the term or phrase to express that subject. One is referred from *Consular service* to *Diplomatic and consular service.*

(c) Turn to this heading (page 208) and check (√) to indicate that the term has been accepted.

(d) Notice the three groups of suggested references mentioned below this heading. The first group, "see also" references, need not be made; they are suggestive of other headings to be considered by the cataloger and eventually get into the catalog, but they are made as "refer from" references when each heading listed in this group becomes a main subject heading. The references suggested in the next two groups, "refer from (see ref.)" and the "refer from (see also ref.)," may be made at once if one is following the Sears list exactly. As these references are made from one heading to another check each heading to show just what references are in the catalog.

The question as to when to make the "see also" cards was touched upon in the last chapter.

The Library of Congress list may be checked and used, as an official list, but the cataloger will have to work out his own

"refer from" references, because, as has already been explained, these are not indicated. The "refer from" references may be added to the list in pencil. When a new heading is used, turn to each heading listed in the "see also" list following; if checked, the reference can be made at once, but if not, enter in pencil "refer from." . . .

2. Card list of headings. A card list of headings is the most satisfactory because it is expansive. In such a list one subject heading is entered on a card and the references are indicated on the same card below the heading, just as in a printed book list. By this method new headings can easily be added and definitions of headings can be filed in the same file. For the large libraries such a list is undoubtedly the most satisfactory.

3. List of headings in the catalog. Some libraries depend upon the headings as filed in the card catalog. This method may be adequate for the very small library, but not for the large one. It is much more satisfactory to have them collected in one separate official file.

4. List of subdivisions of subjects.

a. Subjects divided by place. This is a list of all subjects which may be subdivided by region, as *Agriculture—Canada; Libraries—London; Blind—Pennsylvania.*

Wherever these subjects appear in the official file, check them with a star (*) to show assistants that country or smaller geographical divisions may be used under these subjects. Such headings are designated in the Library of Congress list by bold-faced type.

b. Form divisions. An alphabetical list of form divisions which (1) may be used under any subject, (2) are to be used under special subjects. Example: *History,* to be used under any subject; *History and criticism,* to be used as subdivision under literature headings only.

c. Subjects used also as subdivisions. In the book or card list of subject headings add a note after headings that may also be used as subdivisions. Example: *Accounting.* This heading may also be used as a subdivision under headings for special trades, as *Electric industries—Accounting.*

IV. Other Guides to Subject Headings

There is no limit to the books on which one must draw for information in the preparation of a subject catalog. Encyclopedias, gazetteers, dictionaries, bibliographies, and library catalogs must supplement the regular tools of the cataloger here described. It is almost useless to compile a list of reference books for the sole use of the cataloger, because every subject under the sun comes to the cataloger sooner or later to find its place in the catalog. It is far more practical to make use of such a guide as the *Guide to reference books* compiled by Isadore Gilbert Mudge,[1] than to try to make a selective list which at best would be incomplete.

1. Bibliographies. Subject bibliographies should be part of the equipment of every cataloger, because through aids like these he can survey the various phases of a subject. What cataloger who is attempting to catalog a collection of English literature and language can afford to miss that splendid book *A register of bibliographies of the English language and literature* compiled by C. S. Northup,[2] or to lose sight of the Introduction to this volume written by Andrew Keogh, librarian of Yale University, which contains in a brief space the very essence of the cataloger's reference collection? Similar bibliographies dealing with subjects should be collected by the cataloger to serve not only as guides to subject headings, but also as aids in establishing bibliographical facts, in tracing the works of an author, and in verifying editions.

2. Subject indexes to library catalogs. As has already been stated, the aids most advantageous to the cataloger are those which give book titles, and it is for this reason that one goes frequently to some of the library subject catalogs. The headings given in these catalogs enable one to gauge the flow of current literature and the opportunity of measuring the output of literature is interesting as well as informing to the cataloger. The following extract from the Preface of the

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[1] Mudge, I. G. Guide to reference books. 5th ed. A.L.A., 1929.

[2] Northup, C. S., comp. Register of bibliographies of the English language and literature. Yale University Press, 1925.

Subject index to the modern books acquired by the British Museum in the years 1916–1920 will illustrate how a catalog does demonstrate the growth of new subjects:

> "The [European] war has left its impression on the present Index in the appearance of new headings, such as *Bolshevism, Czechoslovakia, Serbs, Croats,* and *Slovenes, Kingdom of,* and *Military science and conscription* and sub-heading *Rationing.* To it may be ascribed also a slight increase under *Prophecy* and the trebled size of the heading *Spiritualism.* Its most marked effect has been a general decrease of from ten to over fifty per cent in almost all headings of any importance."

a. British Museum subject index. The set of subject indexes to the works added to the British Museum library covering the years 1881–1920 are guides of inestimable value to the student of subject cataloging. They are especially useful for recent headings, names of political divisions, and geographical terms.

The volume of this index covering 1916–1920 contains a subject index of the books relating to the European war, 1914–1918, acquired by the British Museum 1914–1920. This (also procurable as a separate) is an excellent guide to the classification and cataloging of books covering this topic.

b. London Library subject index. The London Library has also issued subject indexes to its author catalog, each with appendix and synopsis of headings. The first was published in 1909 and the second, covering 1902–1922, in 1923. This index gives more detailed subject headings than does the Index of the British Museum, making it not only an excellent guide to specific terms, but also an aid in settling disputes in the spelling of new geographical names.

3. A.L.A. catalogs. The first edition of the *A.L.A. catalog* containing 5,000 volumes was issued in 1893; the second, of 8,000 volumes, in 1904. This second edition was followed by two supplements, one covering 1904–1911 and the other 1912–1921. The latest edition, 1926, is a volume of 1,296 pages, containing more than 10,000 books. It is a classified catalog (Dewey) with author and subject indexes. En-

tries have been based on information obtained from the Library of Congress cards, and card numbers are given by which printed catalog cards may be ordered. Subject headings are suggested for each title, and annotations are given which will prove valuable aids.

This catalog furnishes an example of the classified type, although analytical entries are not included. In the editions of 1893 and 1904, the entries were classified both by the Dewey decimal and the Expansive (Cutter) classifications, and all entries were arranged (1) as a classified catalog, and (2) as a dictionary catalog. In other editions the classified arrangement only was followed, but author and subject indexes were furnished.

4. The Booklist. *The Booklist,* published by the American Library Association, 1905–date (monthly), is also a guide for the inexperienced cataloger. Subject headings are suggested in this list; many are Library of Congress headings, but variations are sometimes made in order to simplify them. For example, the Library of Congress uses the heading *Literature—Modern—History and criticism,* while *The Booklist* uses *Literature—History and criticism.* Headings other than those suggested by the Library of Congress are sometimes added. It is a list suitable for the small library. The monthly index in *The Booklist* is only a partial list of subject headings, but the annual index contains all the headings which have been indicated during the year. No cross-references are suggested.

5. General indexes. New subject headings are often needed before they have appeared in any of the printed lists already mentioned, and many geographical, mythological, and historical headings are wanted which are not to be found in printed lists.

The subject may be so new that no information can be found concerning it outside of the book being cataloged. In this case the cataloger, forced to depend upon his own judgment, will probably choose the term most frequently used by the author. References must be worked out at the time the new heading is adopted.

In selecting new headings, much care must be exercised to make sure that the new name is needed, and that it is not merely a new term for an old subject. *Feminism* is a comparatively new term, but to use it as a subject heading instead of a reference would separate new books on that subject from the books already entered in the catalog under the subject heading *Woman.* It is only the very large library which would make fine distinctions in various phases of a subject, and it is these headings which mislead the inexperienced cataloger in the use of such lists as that of the Library of Congress. We repeat that definitions are the only safeguard.

Many of the new headings are to be found in the periodical indexes, and even in indexes to special society transactions. Nearly all new subjects are discussed in periodicals before they appear as treatises in book form. The cataloger will often be rewarded by consulting these indexes, not only to see what term has been chosen to express the subject, but also to find references to articles which will elucidate the subject. Book reviews will often make clear the scope of the subject treated, and if such reviews compare the work in hand with others of its kind, one has a clue in placing the work in its proper relation with other subjects. Great flexibility must be shown in using terms taken from current indexes, because the editor of an index cannot wait for definite decisions as to terms, since it is usage which determines the terminology. The heading must be used with the understanding that it will be changed later if a better is found. Mark such a heading "Tentative" in the official list.

6. Commercial indexes. The general adoption of accepted library methods of cataloging and classifying books and articles by some of the current commercial indexes is one of the most promising indications of the spread of sound bibliographical work. There is a constant and steady trend toward the use of Library of Congress entries which will unquestionably lead to greater uniformity in all bibliographical work as undertaken in the United States. Furthermore, the fact that publishers are printing in these indexes the serial numbers by which L. C. printed cards may be ordered will

likewise lead to more homogeneous card catalogs and so will make consultation between libraries less of a bugbear. Individuals will buy the printed cards for their own personal files, and become familiar with the technique of their use.

So long as the publishers of these reference aids realize the high standards necessary for the accomplishment of accurate and sound bibliographical work, and employ persons well versed in the art of cataloging and classification, their publications will be considered invaluable tools by librarians, and they will come to pave the way for the cataloger who must depend upon current guides for the latest information.

Nearly all catalogs and indexes issued by the H. W. Wilson Company furnish suggestions useful to the cataloger. Entries in these publications usually follow Library of Congress practice. In many cases the entries include Decimal classification symbols, card numbers for ordering catalog cards, and suggested subject headings. The *Book Review Digest* contains a subject, title, and pseudonym index, and notes which give valuable hints in assigning subject headings for works of fiction. These lists should be freely used as guides for subject headings. They serve to furnish a valuable supplement to the Sears' list. It should be noted that terms sometimes vary in different volumes of the same index.

7. Printed lists of headings for special subjects. The following list may not be complete, but is given in the hope that the users of this book will suggest additions:

(a) *Business*

Rider, A. F. comp. A tentative decimal classification and system of subject headings for the use of the editorial staff of *Business Digest.* N. Y. Cumulative Digest Corporation, 1924.

(b) *Education*

Voegelein, L. B. List of educational subject headings. Columbus, Ohio. State University Press, 1928.

This list will be found more useful in making an index than in making a dictionary catalog.

(c) *Forest products*

U. S. Forest products laboratory, Madison, Wis. Subject headings for use in the library of the Forest products laboratory. . . . Wash. Govt. Print. Off., 1927. 2 v.

(d) *Information file*

Gould, H. F. and Grady, E. A. comp. List of subject headings for information file. 2d ed. N. Y. Wilson, 1925.

(e) *Juvenile headings*

Mann, Margaret. Subject headings for use in dictionary catalogs of juvenile books. A.L.A., 1916.

Wilson, H. W. Co. Pub. Children's catalog; a dictionary catalog of 4100 books comp. by M. E. Sears; with analytical entries for 863 books. Ed. 3 rev. and enl. 1925. (Standard catalog series.)

(f) *Landscape architecture*

Hubbard, H. V., and Kimball, Theodora. Landscape architecture; a comprehensive classification scheme for books, plans, photographs, notes, and other collected material with combined alphabetic topic index and list of subject headings. Cambridge, Harvard University Press, 1920.

(g) *Law*

New York (State) commission for preparation of an index to the session laws and statutes. Heads and subheads for index to New York statutes. . . . Albany, J. B. Lyon Co., printers, 1914.

U. S. Library of Congress. Tentative headings and cross-references for a subject catalogue of American and English law; prepared under the direction of E. M. Borchard, Law librarian, by R. H. Hupper, 1911.

Printed as ms., primarily for the use of the Law library of Congress and Supreme court. Aims to provide a heading for every subject under which persons who use law books are likely to look for their material. Merely tentative in its present form, but intended to be adaptable ultimately to any considerable collection of Anglo-American law.

U. S. Library of Congress. Legislative reference division. . . . Tentative list of subject headings and index rules for the State law index. Printed as ms., 1927. "An outline for index headings and cross references used in the index to State session laws, 1917–1924, in the Legislative reference service, Library of Congress, prepared by Miss Margaret W. Stewart."

U. S. Library of Congress. Headings and subheadings for the index to the Federal statutes. Printed as ms., 1906. 797p. 29cm.

Draft of a classification prepared for the approval of the Judiciary Committee of Congress under act of Congress approved June 30, 1906, and submitted for the criticism of all who have occasion to use the indexes of the Federal statutes.

(h) *Language*

See Library of Congress special lists of subject headings, in this chapter.

(i) *Literature*

See Library of Congress special lists of subject headings, in this chapter.

(j) *Medicine*

U. S. Surgeon-General's office. Index catalogue of the library, authors, and subjects. Wash. Govt. Print. Off., 1880–95. 16v.

——— ——— Second series. Wash. Govt. Print. Off., 1895–1915. 21 v.

——— ——— Third series. Wash. Govt. Print. Off., 1918–date. v. 1-

A dictionary catalog; includes not only books and pamphlets but also a large number of references to periodical articles and other analytics. Excellent.

(k) *Military science*

Rider, A. F., comp. A tentative system of subject headings for the literature of military science. N. Y. Cumulative Digest Corporation, 1922.

(l) *Music*

Wallace, Ruth, ed. Suggested list of subject headings for musical scores. In her Care and treatment of music in a library. A.L.A., 1927, p. 35–44.

(m) *Psychiatry*

Peck, W. C. S. On subject headings for psychiatry and psychopathology. Library Journal 50:1036–37. December 15, 1925.

(n) *Shakespeare*

See Library of Congress special lists of subject headings, in this chapter.

(o) *Theology*

Pettee, Julia, comp. List of theological subject headings. N. Y. 1925. Now (1929) available at A.L.A. headquarters, Chicago. Manifold copy. An excellent and exhaustive list of headings with references. Not to be confused with the Index to the classification, which is not a list of subject headings.

References

Akers, S. G. Choice of subject headings. In her Simple library cataloging. A.L.A., 1927, p. 32–39.

For the small library.

Bishop, W. W. Subject headings. In his Practical handbook of modern library cataloging. 2d ed. Williams, 1924 (1927), p. 111–145. Adapted in part from a paper printed in the Library Journal 31: c113–23. 1906.

Gives an excellent survey of subject headings and how they should be handled in the catalog department.

Blackall, E. W. Analytic entries in card catalogs of small libraries. New York Libraries 8:80–82. May, 1922.

When and how to make analytics.

Boston catalogers discuss subject headings. Library Journal 50: 493–95. June 1, 1925.
Discussion of a printed list to supplement or replace the A.L.A. list.

Cutter, C. A. Subject entry. In his Rules for a dictionary catalog. Govt. Print. Off., 1904, p. 66–82.
The best treatise on the subject, although time has changed some of the rulings given by Cutter.

Fellows, Dorkas. Subject entries [and] subject references. In her Cataloging rules. Wilson, 1922, p. 38–54.
Treats details of form of card.

Goss, E. L. Library of Congress subject headings, old and new. Library Journal 51:1075–77. December 1, 1926.
Mention is made of specific changes in Library of Congress terms and emphasis is given to the care which should be exercised in the choice of new headings.

Hall, W. L. Subject subdivisions and uniformity in the use of subject headings. Library Journal 51:1073–74. December 1, 1926.
How a list of subdivisions under subject is maintained by the Virginia state library.

Hanson, J. C. M. The present [1909] dictionary catalog [of the Library of Congress] its origin and development, with some comments on the plan of subject headings. A.L.A. Bulletin 3:386–97. Papers and Proceedings, September, 1909.
An excellent article on Library of Congress practice.

Hawkins, E. E. Analyzing books for a small library. Public Libraries 16:375–76. November, 1911. Also in New York Libraries 2:261–62. July, 1911.

Hitchler, Theresa. Subject entries and references. In her Cataloging for small libraries. Stechert, 1926, p. 35–67.
Practical and well illustrated by subjects assigned to specific book titles.

Leavitt, Julian. Unlocking the libraries. New Republic 52:350–52. November 16, 1927.
An adverse criticism of the dictionary catalog with a plea for the use of the classified type.

McNair, M. W. The Library of Congress list of subject headings. A.L.A. Bulletin 6:231–34. Papers and Proceedings, July, 1912.
A description of the List, with some reasons for the choice of headings. A valuable article.

Mann, Margaret. The cataloging of juvenile books with some suggestions for handling subjects. In her Subject headings for use in a dictionary catalog of juvenile books. A.L.A., 1916, p. 1–23.

Pillsbury, A. M. Cataloging for the small library. Library Journal 51:1078–80. December 1, 1926.
Some practical suggestions with a good résumé of the small library problems, including subject headings.

SHAW, G. B. Analytical entries for the small library. Libraries 33: 177–78. April, 1928.
Gives four reasons for making analytics and makes a plea for many.

SNOW, E. N. Subject heading work for small libraries. Michigan Library Bulletin 18:222–26. October, 1927.

VINE, G. On the construction of the subject catalogue. Library Association Record 11:486–507. November, 1909; discussion p. 523.
An Englishman's favorable opinions on the dictionary catalog. While showing some divergence from Cutter's rules, the writer gives excellent reasons for his differences. Contains a clear discussion of country headings.

THOUGHT QUESTIONS

1. Trace the subject headings (a) Mound builders; (b) Moving pictures; (c) Religious education; (d) Sepoy rebellion in the following: A.L.A. list of subject headings, Sears list of subject headings, British Museum subject index, Readers' Guide to Periodical Literature; and tabulate the terms used for these.

2. What is the difference between *Statistics* as a main subject and as a subdivision of a subject?

3. What is the difference between the subject of a book and a subject heading for the same book?

4. Would it be wise to change from old form to new form of heading in the following cases? Give reasons:

Old	*New*
a. Municipal art	Art, Municipal
b. Cities—Planning and layout	City planning
c. Country schools	Rural schools
d. Saint Valentine's day	Valentine's day
e. Soil fertility	Soils
f. Rood screens	Screens (Church decorations)

5. Do the Boston Athenaeum and Peabody catalogs give references both to and from a subject?

6. How would you interpret the following subject headings?
   a. Government ownership of railroads
   b. Railroads—U. S.
   c. Mountain railroads
   d. Narrow-gauge railroads
   e. Railroad engineering
   f. Engineers
   g. Locomotive engineers
   h. Carriers
   i. Freight and freightage

7. Which of the following subjects would you divide by the form division, *Study and Teaching:*
   a. Railroad associations
   b. Puddings
   c. Cookery
   d. Garden cities
   e. Canals
   f. Physics
   g. City planning
   h. Landscape gardening
   i. Language
   j. English language
   k. German language
   l. Gt. Brit.—History

8. How many of the following references would you make:

a. Colophons	See Title-pages
b. Bohemia	See also Czechoslovak republic
c. Dairy chemistry	See Agricultural chemistry
d. Cyanotype	See Blueprints
e. Bread	See also Baking
f. Military hospitals	See Hospitals, Military

9. What is the difference in meaning between the following subject headings?

a. Egypt—Antiquities	and	Egyptology
b. Culture	and	Civilization
c. Child study	and	Educational psychology
d. Bohemian language	and	Czechic language
e. Minerals	and	Mineralogy
f. Danish folk-songs	and	Danish ballads
g. Efficiency, Industrial	and	Factory management
h. Greenhouses	and	Conservatories
i. High schools	and	Education, Secondary
j. Greek literature	and	Classical literature
k. Plate glass	and	Cut glass
l. Myths	and	Mythology

10. Make information reference cards for the following narrow subjects which will lead one to the broader subject, which includes each: Light; Sound; Heat; Magnetism.

11. Subdivide the heading *Mexico. History,* by period divisions.

12. Make necessary references to and from *Poisonous gases* connecting with any headings listed in the Sears list.

13. Make out the subdivisions for the subject heading *Arctic regions,* so that all material on this subject can be kept together in the dictionary catalog.

14. Give an example of a book having the subject heading *Poetry* and another where *Poetry* is used as a form subdivision of a subject.

15. What is the difference in the use of the subdivisions: *Collected works* and *Collections,* and of *Fiction* and *Stories* when used as form subdivisions?

16. Explain how the forms *Essays, Poetry,* and *Drama* when used as main headings in the dictionary catalog duplicate the arrangement of books on the shelves in the literature class when the Decimal classification is used.

17. In cataloging books in the literature class the author entry is often the only entry needed. Explain this.

18. In what way does the dictionary catalog attempt to display its subjects in a logical or systematic order?

Chapter XI

Dictionary Catalog—Arrangement

I. Introduction
II. Rules for Alphabeting
III. Points of Agreement and Disagreement
IV. Disputed Rules
V. Transliteration

I. Introduction

Alphabeting. The term *alphabeting* is used here to mean the arrangement of entries in a catalog, the basic plan of which is alphabetical. It should not be confused with the broader term *filing* which may apply to any plan of arrangement, including the alphabetic.

The dictionary catalog furnishes a very interesting problem in alphabetic filing. In bringing author, title, subject, form, and series entries together in one file, many obstacles are encountered.

The use of the catalog depends to a large extent on the ease of its manipulation, therefore it is most important that the system of filing the entries be as simple and clear as possible. Theoretically the alphabetic filing is considered as easy as A-B-C, but after observing, in the previous chapters, the intricacies found in the choice of entries, it is apparent that their arrangement will not be a simple matter and that rules must be followed to insure a uniform method in arrangement.

II. Rules for Alphabeting

The first American code of rules for alphabetic file of entries for a dictionary catalog was compiled by C. A. Cutter in 1876 and is printed in *Rules for a dictionary catalog,* 4th ed., 1904. While Mr. Cutter was one of the first to advocate an alphabetic catalog, he introduced many deviations from the strictly alphabetic order which he evidently borrowed

from the classified catalog. There has been a gradual tendency to get farther and farther away from the Cutter rules as regards this point of logic in a dictionary catalog, and to adopt a more nearly unbroken alphabetic arrangement.

Today we are unable to point to any one code of rules for alphabetic filing uniformly adopted, or followed by even a majority of libraries. Some libraries have printed their own practice in pamphlet form and while such rules have all been based on Cutter's rules, many variations have been introduced.

The following manuals for alphabetic filing have been issued.

Barnstead, Winifred G.
Filing rules for dictionary catalogues . . . . Recommended . . . . for use in the public libraries of Ontario. 1918.

Childs, James Bennett
Rules for alphabetical filing by words in the dictionary catalog . . . . together with "Manchester," a specimen of such filing . . . . 1921–22.
Mimeographed edition prepared by the University of Illinois Library School.

Cincinnati. Public Library
Filing rules for the arrangement of the dictionary catalog of the Public Library of Cincinnati and Hamilton County. 1928.

Cleveland. Public Library
Filing rules for the arrangement of the dictionary catalogs of the Cleveland Public Library. 1922.

Pittsburgh. Carnegie Library
Rules for filing cards in the dictionary catalogues of the Carnegie Library of Pittsburgh. 3d ed., 1926.

In many points, these manuals do not agree. This variation is to be expected as filing practice has never been standardized for library catalogs. They do, however, furnish excellent outlines for discussion and show the practice of some of the best libraries. Unfortunately, the Library of Congress has never printed its rules for alphabetic filing, but recent indications give some hope that such a code may be expected in the near future.

Since the Carnegie Library of Pittsburgh was the first to print a manual of filing it has been adopted in part by the Library of Congress, by H. W. Wilson Company, and by many libraries. This code gives rules and illustrations for

filing the unit card. The *style book* issued by H. W. Wilson Company, 1921, contains the practice of that firm in arranging entries in its various publications.

Most cataloging manuals treat the subject in more or less detail.

III. Points of Agreement and Disagreement

As it is impossible to repeat in this text all the rules for alphabeting, only those on which there is the greatest diversity of opinion will be mentioned. By considering several methods now in use the student will have some conception of the problem and will know what to observe when using catalogs. Filing rules must be understood both for arranging cards in the catalog and for the quick and effective use of printed book catalogs and indexes.

The student should adopt the Cutter rules or those in one of the manuals mentioned above and follow the directions consistently while doing practice work in alphabeting, but he must also know the possible variations from its rules in order to recognize them when he begins to file cards into a catalog already functioning, if this one does not follow the code he has learned.

An alphabetic arrangement by words as contrary to letter by letter filing, is most generally adopted. The following example will illustrate the two methods.

Word method	*Letter by letter method*
Air	Air
Air—Analysis	Air—Analysis
Air analyzer	Air analyzer
Air as a remedy	Air as a remedy
Air-brakes	Air-brakes
Air, Rarefied	Aircraft
Air-ships	Airedale
Aircraft	Air, Rarefied
Airedale	Air-ships

In filing word by word one follows the general principle of "Nothing before something"; regard the space between words as "nothing" and arrange word by word.

Alphabetical filing is generally followed throughout the catalog for all principal entries, except History. Here the

arrangement is usually chronological under each country, so that the reader may pass from one period to the next.

IV. Disputed Rules

The disputed points mentioned below should be studied comparatively in the various codes.

1. Arrangement under place names (countries, states, cities, etc.) By far the most difficult problem to be solved is the arrangement of entries under the same place.

Method 1: Arrange entries having the same place name in three distinct alphabets:

(1) Main entries for works by the government as a whole, for works by executive departments and offices, and for constitutions and charters. Immediately following author entries for each of these, arrange subject entries for works about them.

(2) All subject entries pertaining to the country or political division as a whole.

(3) In one general arrangement, works by and about government institutions which are not classed with executive departments, works by and about associations, and titles having name of place as entry word.

Examples:

(1) U. S. Congress (as author)
U. S. Congress (as subject)

(2) U.S.—Description and travel
U. S.—History
U. S.—Navy

(3) United States army and navy journal
United States catalog
United States sanitary commission

The chief disadvantages of this arrangement are: (1) the user of the catalog, not knowing the cataloger's criterion of

distinction between an executive office and an institution, will look in the first alphabet for entries which are filed in the third alphabet and vice versa. (2) Subjects with which the executive offices are concerned are so far removed from works by and about these offices that users fail to connect the one with the other.

Method 2: File all entries in the three groups in one alphabetic file.

Method 3: Keep institutions, associations, and titles separate but put the rest in one alphabet.

Method 4: Adopt two alphabetic arrangements in which the division is according to form of entry, entries consisting of name of place followed by period or dash as a subheading being placed in one alphabet, and all other entries in second alphabet.

2. Arrangement of subdivisions under subjects. The three methods in use are:

Method 1: File according to groups: (1) Form or relation other than space; (2) States or geographical divisions; (3) Different styles of headings, as headings formed by inversion.

Method 2: File all entries falling in any one of these groups in one alphabet regardless of logic, punctuation, or inversion.

Method 3: (1) File all subdivisions in one file, except place divisions; (2) File place divisions back of guide card marked "By place"; (3) File institutions and associations.

Examples—Method 1:

(1) Music—Bibliography
Music—Poetry
(2) Music—Russia
Music—United States
(3) Music, Primitive
Music and morals

Examples—Method 2:

Music and morals
Music—Bibliography

Examples—Method 2, continued:

Music—Boston
Music—Poetry
Music, Primitive
Music—Russia
Music—United States

Examples—Method 3:

Music—Bibliography
Music—Poetry
Music, Primitive
By place (Guide card)
Music—Boston
Music—Russia
Music—United States
Music and (Guide card)
Music and morals

3. Arrangement of added entries (author). The question here is: should there be two files, one for main entries which precede a second file of added entries, or should the main and added entries be filed in one file?

Attention should be given to the fact that on the Library of Congress cards *subject entries* are indicated in one series numbered in Arabic, and that *secondary entries* are indicated in a second series numbered in Roman. This second series sometimes causes trouble. If a second alphabet for entries under a literary worker is to be maintained, entries for publications on which the writer worked as editor, translator, or in a capacity manifestly secondary to that of the author, plainly belong in the second alphabet. But when the writer becomes an adapter of another writer's works, or a compiler of a publication issued by a society or government office, he at once assumes a position analogous to that of a joint author. As catalogers well know, it is often difficult to decide whether the main entry should be under the original writer or the adapter, under the compiler, or under the society or office responsible for the publication of the work. Some users of the catalog will look first under the one heading, some under the other; but the great majority will look in the first alphabet. Therefore, all such entries should be placed in the first alphabet.

Analytical author entries plainly belong in the first alphabet, although when indicated on the Library of Congress cards they are in no way distinguished from other secondary personal entries.

In the codes of rules published by the Pittsburgh, Cleveland, and Cincinnati public libraries, the above distinction as to the filing of added entries has been brought out.[1]

4. Arrangement of entries under subjects. Most libraries arrange all entries under a subject alphabetically by author while some arrange certain subjects, as Science, chronologically by date of publication, filing the latest dates first. Another method is to divide the entries into two classes, e.g., books before 1900, and from 1900 on.

5. Arrangement of editions. In arranging the various editions of a work under the author, the following questions arise: Shall translations be separated from editions in English and be kept together by language; or, shall all editions of the same work be kept together? If the latter plan is followed, shall all editions be arranged (1) by title, (2) by number of the edition, or (3) by date of the edition; or, shall one alphabetical arrangement be followed disregarding number, date, and translations?

6. Arrangement of the books of the Bible. By the old rule all books of the Bible were arranged in the order in which they appear in the Bible; now the tendency is to arrange them in one alphabet or under each Testament alphabetically.

7. Umlaut. Cutter recommends (Rule 299) filing the umlaut as *ae, oe,* and *ue,* but some libraries believe the more simple arrangement is to file as *a, o, u.* This has been a much disputed rule and each library seems to be following its own preference, although the *ae, oe,* and *ue* arrangement is favored.

V. Transliteration

The filing of names printed in other than Roman letters is a perplexing problem, the study of which belongs to advanced students.

[1] See Pittsburgh Carnegie Library. Rules for filing cards. Section "Author arrangement." Illustrated by filing under *Andrew Lang.*

The Library of Congress has issued systems for the transliteration of several languages. These are printed on standard catalog cards and are included in their set of card catalog rules mentioned in Chapter VII. The *A.L.A. catalog rules,* p. 65–73, contain reports of the American Library Association Committee on Transliteration in which tables are given. A report on "New Russian orthography" appears in the *A.L.A. Bulletin,* v. 21, p. 50–51, April, 1927.

References

Note: References given here are in addition to those already mentioned in this chapter.

Akers, S. G. Arrangement of cards in a catalog. In her Simple library cataloging. A.L.A., 1927, p. 70–73.
Gives a few rules culled from other manuals. Illustrations are included.

Clapp, C. B. Arrangement of cards under place names in a dictionary catalog. Library Journal 38:73–77. February, 1913.

Hastings, C. H. Proposed manual on the arrangement of cards in alphabetical catalogs. A.L.A. Bulletin 9:270–73. Papers and Proceedings, July, 1915.

Linderfelt, K. A. Alphabetic arrangement of titles. In his Eclectic card catalog rules. 1890, p. 46–75.
Excellent, but advanced.

Thought Questions

1. Describe method of alphabeting followed by Library of Congress in its *Subject headings used in the dictionary catalogues of the Library of Congress.*
2. Mention cases in which chronologic arrangement of entries under subjects would be more useful than alphabetic.
3. Examine three library catalogs, either in card or book form, and report on the alphabeting followed under New York City, New York State, and all other entries beginning with word New York.
4. What in your estimation is the easier to understand, word filing or letter-by-letter filing?
5. What would be the advantage if all libraries would adopt the same system of filing?
6. Arrange the following in one alphabet, using the word method of arrangement:

Black death	Black, W.
Black Hills	Blackie, J. S.

Black Hawk war
Blackboards
Blacksmithing
Black, William 3
Black family
Blackfoot Indians
Black-flies
Blackburn, E. M.
Black and white sketches
Black Forest
Black Sea
Blackbirds
Black, William George 4
Black, Walter 2
Black, William, 1857–1907 5

7. After studying the Pittsburgh rules for filing, draw up rules for filing analytic entries as shown on a unit card.

Chapter XII

The Classified Catalog

I. Plan
II. Shelf-List Versus Classified Catalog
III. Advantages of Catalog Over Classification
IV. Methods of Entry
    1. Books covering more than one subject
    2. Analytical entries
    3. References in the subject list
    4. Special types of literature
V. Alphabetical Subject Index
VI. Variations in Files
VII. Codes of Rules
    1. Author part
    2. Subject part
VIII. Some Things Accomplished by the Classified Catalog
IX. Adoption by Libraries
    1. Use in special departments
X. Types of Classified Catalogs
    1. Book catalogs
    2. Card catalogs
XI. Conclusion

This type of catalog is based on some definite system of classification. Many of the principles introduced here have already been noted in the two schemes of classification described in Chapters IV and V.

I. Plan

This type of card catalog should be made up of three parts or files, although strictly speaking the subject file is in itself the Classified catalog:

1. Author and title file
2. Subject, or classed file
3. Alphabetical subject index to subject file

1. Author and title file. The author and title section of the classified catalog is exactly like the author and title catalog described in Chapter VIII. The entries are full; they follow

the same rules, contain exactly the same information, and are filed alphabetically. Though kept in a separate file, it is an integral part of the classified catalog, since it is the only part which furnishes information about the *author* and *title* resources of the library.

2. The subject file. The subject part, or the classified catalog proper, is an elaboration of the shelf-list. Its arrangement is usually based on the same classification system as that used for the arrangement of the books on the shelves. If the Decimal classification has been adopted by the library for classifying its books, this system will determine the order of subject entries in the subject catalog. Again, if the Library of Congress scheme has been chosen, this plan will form the base for subject arrangement for the catalog. Any system of classification having a flexible notation may be used for making a classified catalog, since such a plan insures logical arrangement of subjects. Necessarily, the degree of usefulness of the classified catalog depends on the worth of the classification scheme. A poor and illogical scheme will produce an equally poor catalog, and on the other hand a good scheme, one which is logical, up-to-date, scientific and simple, will produce a catalog of uniform worth.

It has already been demonstrated that both the Decimal and the Library of Congress classifications can be used to advantage for the logical arrangement of books on the shelves, and that because of the flexible notation of each, books may be inserted between other books without interrupting the logic of the system. A catalog may likewise be based on either of these systems and the same logical arrangement attained for the catalog as has been achieved for the shelves. The card becomes the dummy for the book, and the call number on the card, being the same as that which determines the arrangement of the book, becomes the medium of arrangement for entries in the catalog. The cards, instead of being filed alphabetically as in the author and title catalog, are filed by the classification symbol. For example, illustrating by the Decimal classification, all cards bearing the class number 720, the number for Architecture, will come together in the catalog.

These will be followed by all the cards which bear a decimal of this number. The cards bearing the number 729.38 (Doors) will fall into this group, and in like manner the whole group of architecture will be built up on cards in the same way that the books appear on the shelves, giving the reader an opportunity to survey the whole collection of books covering this field. Like the classification system, all subjects are grouped logically, related subjects are correlated, and a sequence of topics is maintained.

3. The alphabetical subject index to the subject file. This will be discussed later under Section V, after the methods of entry, which refer only to the classified file, have been treated.

II. Shelf-List Versus Classified Catalog

One may well ask the question, why build up another record exactly like the shelf-list when the shelf-list is already available? *First,* the shelf-list is similar to only one part of the classified catalog; its purpose is definitely that of showing the history of each book in the library, recording its location on the shelf, its withdrawal, the number of copies possessed by the library, and other official items which are important as records but which have little or no interest to the user of the catalog.

Second, the shelf-list is frequently brief in form, noting only the items about a book which are needed for official use. The reader demands a more complete entry than that on the shelf card if he is to receive any guidance in his book selection. When he is confronted with fifty or a hundred titles all treating of the same subject, he must have some indication on the cards to help him in differentiating between books. Again the date of publication, the publisher, the fact that the book is illustrated, will determine his selection. Therefore, the catalog cards must be more full in details than the cards which make up the shelf-list. In fact, they must be just as elaborate as are the author cards which make up the author catalog.

Third, the shelf-list does not usually contain entries for

parts of books (analyticals), thus making it impossible for the reader to find from this list *all* the material contained in the library under any one subject.

The shelf-list may serve as a subject catalog. If the shelf-list is made up of unit cards, and analytical entries are added as the books are classified, the library has a classified subject catalog which is adequate for all practical purposes, *provided* an author catalog is already accessible and a good alphabetical subject index is made as a key to the classified file. Frequently libraries use the shelf-list in conjunction with the dictionary catalog to answer the questions which only the classified catalog can answer, but such use is likely to cause inconvenience to the assistants who depend upon the shelf-list as an official record. A good classified catalog goes so far beyond the boundaries of a good shelf-list that one should not confuse the two and conclude that because the arrangement of entries is the same, the results to the reader are equal. They are no more nearly equal than an elementary work and an advanced treatise are equal. The two books may treat of the same subject, but the results gained in reading them are quite different.

Most large libraries would find it far safer to develop a classified catalog to supplement the dictionary catalog than to allow the public to consult the shelf-list which is in constant use by the staff.

III. Advantages of Catalog Over Classification

When making a classified catalog, the *classifier* must consider the place each book will take in the catalog as well as on the shelves, and must realize the advantages the catalog has over the shelves in being able to display not only one subject, but many, and even every phase of a subject. We have already realized that a book, because of its physical make-up, can appear under one subject only on the shelves, and that the catalog, being a flexible file, can show any number of entries for one book. The classifier not only indicates the class numbers needed, but he also indicates the subject index entries.

IV. Methods of Entry

1. Books covering more than one subject. Books treating of two or more subjects or topics are given as many class symbols as are needed fully to catalog *by subject* the contents of the book. For example, a book entitled *Electricity and magnetism,* classified by the Decimal scheme, would appear in the classified catalog under two numbers: 537 for *Electricity* and 538 for *Magnetism.* Two cards exactly alike would be filed, one card under each of these numbers. One number (537) would be a part of the call number of the book, and the other number (538) would be added to another card just above the call number of the book, as a filing number which would bring this card into the catalog along with all other material on magnetism. Thus such a book has two subject cards in addition to the author card, one to file under 537, which is the same number under which the book is classed on the shelves, and another, which is an added subject number (538). Emphasis must be given to the fact that the call number of the book must appear on every card because the book could not be located without it. It is customary to use different colors of ink for the call number and the analytical number so that the reader will not confuse the two. Black ink can be used for the call number and red ink for the number which is added above the call number as a filing number.

Black ink →

537 Gerard, Erie
G31 Electricity and magnetism
1897

Red ink →
Black ink →

538 Gerard, Erie
537 Electricity and magnetism
G31 1897

The object of these entries is to make the book appear in connection with the several and various fields to which it contributes. An example of this is *Mastery of the Pacific* which must appear under foreign affairs of Great Britain and also

foreign affairs of U. S. Many books on peace contribute at the same time to international ethics and international arbitration. A book called *Citizenship in the industrial world* should have class numbers to express citizenship, laboring classes, industry and state, and organization of industry. Thus it is that the determination of subject entries and class entries for a book go hand in hand and are the result of one and the same process of examination.

2. Analytical entries. If it is advisable to analyze a chapter in a book, a bibliography, or any other outstanding material which is not shown on the main author or subject entry, the classifier treats such a part as a separate book, classifying it so that it will fall with other material in the classed catalog treating of the same subject. For example, a general book on architecture may contain a valuable chapter on cathedrals which would be useful if it could be cataloged and filed with other entries on cathedrals. To accomplish this, the number for cathedrals, 726.6 (Dewey), is assigned to the chapter, and a card is prepared with this number as a filing medium, so that it may file with the cards for the books classed under this subject. The number for cathedrals is added above the black call number, in the same manner as noted on the card illustrated above.

3. References in the subject list. In order to correlate subjects widely scattered in the classification scheme, references may be used. By this means the reader is able to collect material presenting the various points of view of a subject. For example, religious art belongs to two large groups, Religion and Art, but the reader cannot exhaust the subject until he knows where all the material is classified. If some books are classed in Religion and others in Art, a cross-reference from one symbol to the other will show the reader how he may collect all the material on this subject from the two points of view. Example of a reference in a classified catalog: 246 See also 755.

Such a reference card would be filed directly after all the cards bearing the number 246 which is the symbol for religious art from the religious viewpoint.

The number 755, to which reference is made, is the symbol for religious art from the aspect of art.

4. Special types of literature.

a. Biography. Books of biography may be treated in one of three ways in the classified catalog. *First,* if the system of classification places the lives of persons with the subjects to which their work has contributed, these books take their regular places with respective subjects in the scheme of arrangement and are indexed in the alphabetical subject index. *Second,* if the library wishes to maintain an alphabetical file of its biography, arranged by the biographee, or person written about, a card can be made in addition to the author card with the name of the biographee written on the top to serve as the filing word. These cards can be arranged in a separate file quite independent of any other file; or, *third,* they may be filed in with the author and title cards. This last method would introduce a subject card into the author and title file of our catalog, but there are advantages in having the works about an author with the works written by the same author.

b. Fiction. Cards for all works of fiction may be arranged according to the classification scheme, or they may appear in the author and title list only, or they may, like biography, be filed in an entirely separate file, quite independent of other files, and so form a separate fiction catalog.

c. Forms of literature. When the author is the essential element in determining the value of the book, it is not always necessary to show the form value in the catalog as well. The classified catalog may, without violating rules, omit such classes as poetry, drama, and essays, since the books in these classes are usually sought under the name of the author. By listing these in the author part of the catalog, the average request for them is answered. A reference card filed under the class number in the classed catalog can refer to the shelf-list where the groups are complete, as 824 *English poetry See* "Shelf-list for books in this group." Here, as in most other cases, the need for these entries must be carefully considered. Some libraries may find them very useful.

d. Bible and similar sacred books. It is unnecessary to

duplicate entries in both the author and classed parts of the catalog when they are alike; a reference to the author file will be sufficient. For example, a reference card filed under 220 (Bible) in the classed catalog telling the reader to "see Bible" in the author file, will answer every need and be a wise and economical measure.

V. Alphabetical Subject Index

This index answers the same purpose as the Relativ index in the Decimal classification. It furnishes the reader with an alphabetical key to the classification system by which the cards are arranged. For example, a reader wishing to know what books the library has on architecture may not know that 720 is the number standing for this subject. Therefore, he must be able to locate the word in an alphabetical index, where he will be referred to the proper number. This index is made on cards to allow for inserting new subjects whenever needed. Each entry being written on a separate card, any number of index entries may be made referring to the same number. It will be necessary to make entries freely in order to cover synonymous terms. Such entries should be complete and not merely reference entries from one term to another. It is just as economical to make a full entry in an index as to make a cross reference, since but one line is used in either case, and by so doing the reader is given a direct guide to the information he is seeking. Example:

Each entry on a separate card

Correct Method

	D. C. no.
Scientific management..	658
Management, Scientific.	658
Industrial efficiency....	658
Efficiency, Industrial...	658
Works management....	658

Incorrect Method

Management, Scientific..	See Scientific management
Industrial efficiency....	See Scientific management
Efficiency, Industrial....	See Scientific management
Works management....	See Scientific management

Any library contemplating the making of such an index should study the plan worked out at the John Crerar Library

in Chicago in connection with its classified catalog in card form, and also that at the Engineering Societies Library in New York.

VI. Variations in Files

It has been demonstrated that this type of catalog may be made up of more than the three files as mentioned under the Plan, page 230, depending upon the number of separate files developed by the cataloger. If variations are made in the treatment of fiction and biography, the catalog will consist of five files instead of three, as follows:

1. The author and title file (alphabetical)
2. The subject file (filed by subject symbol)
3. The subject index to the subject file (alphabetical)
4. Subject list of individual biography (alphabetical)
5. Author and title list of fiction (alphabetical)

VII. Codes of Rules

1. Author part. The same codes described for the making of an author and title catalog (A. L. A. rules) should be used in making the author and title part of the classified catalog. The variations which must be made in this file if it is to be properly correlated with the subject part of the catalog are to be found in *Library school card catalog rules* by Melvil Dewey.[1]

While this code contains rules for both the author and subject part of the classified catalog, its value today is limited to the making of the subject catalog. The rules for author entry are somewhat out of date, as are also the sample cards. A new code for the compilation of this type of catalog is much needed, and should the general demand for the classified catalog be renewed, such a work would surely be forthcoming.

2. Subject part. The main code for the making of the subject catalog is the classification system chosen as the foundation for its arrangement. Even more thorough study must

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[1] Dewey, Melvil. Library school card catalog rules with . . . sample cards for author and classed catalogs . . . and with bibliography of catalog rules, by M. S. Cutter. 6th ed. rev. Boston, 1899. Now out of print, but available in libraries.

be made of the book when a catalog is the objective than is necessary when merely classing the books for the shelves. Often it is desirable to follow a quite different policy when classifying material for the catalog, since more detailed information is needed and close classification must be followed. It is entirely feasible to classify broadly on the shelves and much more minutely in the catalog. This plan was followed in reclassifying the Engineering Societies Library in New York with very satisfactory results both in the shelf arrangement and in the classified card catalog. By this method long call numbers on the books are avoided and, on the other hand, the catalog can be made as detailed as possible by adding long filing numbers which in no way confuse the reader, because he never has to copy them in order to get his book.

VIII. Some Things Accomplished by the Classified Catalog

(a) A logical arrangement of subjects is assured because the catalog is based on a system of classification.

(b) The reader is able to survey a whole field of literature as it is spread out before him in logical order.

(c) The catalog shows what books are grouped together on the shelves.

(d) The catalog shows the strength of the library collection in any one class.

(e) Any class or subject can be printed separately at any time.

(f) In one catalog are combined an alphabetical and a logical array of subjects.

(g) Because of the number of separate files, more people can use the catalog at one time.

(h) The subject file can be built up of printed L. C. cards by merely transferring the classification symbol as a filing medium.

IX. Adoption by Libraries

The classified catalog was much in favor in American libraries up to the year 1893. After this date there was a decided turn from the logical arrangement of subjects to the

alphabetical, and the dictionary catalog came into general use. Logic was sacrificed for quick reference, and the feeling prevailed that the users of the library catalog were much more familiar with alphabetical indexes, and could, therefore, more quickly learn to use the dictionary catalog. This is undoubtedly true in the average public library, but in scholarly and special libraries the want of logic in the dictionary catalog detracts much from its value.

Unfortunately the subject indexes to the early catalogs of the classified type were very inadequate, since readers were given only the subject index as printed in the Dewey classification. This index, while adequate as an alphabetical key to the classification system, was not exhaustive enough to serve as an index to a growing catalog; subjects were not up-to-date and the lack of adequate references made it difficult to locate material. Because of this inadequate key, the classified catalog began to lose supporters.

In Europe, this type of catalog is still used and probably has more friends than the dictionary catalog.

1. Use in special departments. The classified catalog is convenient for use in centralized station work, in commission offices, school division offices, centralized departmental work in a university library, and wherever classed books must be chosen for groups outside of the central library. The arrangement being, in most cases, the same as that of the books on the shelves, it enables one to pass from the catalog to the shelves quickly and thus to expedite the filling of book orders for outside agencies.

For libraries devoted to a special class of books collected for the use of specialists, such a catalog would seem to answer the demands more readily than another type, because it brings all the books of one class into a systematic whole. For scientific men who almost unconsciously classify their material, it is a satisfaction to find subjects displayed according to some scientific scheme of classification.

X. Types of Classified Catalogs

1. Book catalogs. The classified catalog in book form is very common; in fact, most of the library bulletins of

accessions follow this arrangement. The classified type is probably the most economical form of book catalog. The full entry, arranged by classification symbol, is given but once, forming the main body of the catalog, while authors and the alphabetic subject list appear as indexes only, and subject divisions are given in index form only. The classified catalog of the Carnegie Library of Pittsburgh is a good example of this type; also the *A.L.A. catalog 1926.*

2. Card catalogs. The John Crerar Library in Chicago has long maintained a classified catalog in card form, based on the Decimal classification, and the Engineering Societies Library of New York has such a catalog based on the same classification as expanded by the Institut International de Bibliographie, at Brussels.

XI. Conclusion

Catalogs must be chosen to answer the demands of the special type of reader using the collection. What is satisfactory to the reader of popular fiction and recreational reading may not answer for the student and specialist. The classified catalog gives the logical arrangement of subjects usually desired by scholars. They want logic in the arrangement of the books on the shelves and they find the same order useful in the catalog; therefore, the classified type would seem to be best adapted to the needs of such readers. Those using the library as a means of obtaining a definite and quick service would probably find the dictionary catalog more useful.

References

Bishop, W. W. Classed catalog. In his Practical handbook of modern library cataloging. 2d ed. Williams, 1924 (1927), p. 45–48.

Bond, Henry. Classified *vs* dictionary catalogues. Library Association Record 2:313–18. June, 1900.

Funnell, H. A. A short sketch of the history of the classified catalogue in the British Isles. Library World 14:197-200. January, 1911–1912.

Hulme, E. W. An attempt to delimit a natural and convenient frontier line between the author and subject catalog [and] The classification of subject matter in the subject catalog. Library Association Record 8:31–45. February, 1906. (Discussion p. 66–68)

Leavitt, Julian. Unlocking the libraries. New Republic 52:350–52. November 16, 1927.
An adverse criticism of the dictionary catalog with a plea for the use of the classified type.

Lillie, William. Merits of the classified and dictionary catalogues. Library World 17:97–102. October, 1914.

Pittsburgh. Carnegie Library. Index to the classified catalogue of the technology department. 1916.
The index, not an article about it.

Plea for the subject catalog (Harvard College. Report of the Committee to visit the library, 1876, p. 9). In Sawyer, H. P. The library and its contents. Wilson, 1925, p. 315–521.

Quinn, J. H. Dictionary *vs* classified catalogues for public libraries —The classified catalogue. Library Association Record 3:514–20. October, 1901.

Chapter XIII

Routing New Books and Cards Through the Department

I. The Study
II. The Problem
III. The Routine Process
1. Forwarding books for cataloging
a. Rush books
b. Groups of books
2. Routine of classification and cataloging
a. Fiction
b. Classed books or non-fiction
(1) Preliminary search
(2) Searching in the library catalog
(3) Classifying
(4) Cataloging
(5) Revising books and cards
(6) Shelf-listing
(7) Separating books and cards
(8) Marking and forwarding books
(9) Forwarding and duplicating cards
(10) Adding headings to L. C. cards
(11) Correcting L. C. cards
(12) Revising typed headings
(13) Arranging cards for filing
(14) Revising finished cards
(15) Filing and revision of filing
3. Statistics

I. The Study

Up to this time we have considered what can be accomplished by cataloging and classification, but have given little consideration to the technique of making a catalog or to the technique required in getting books ready for the shelves. The previous chapters have described the classification systems in most general use and have explained the types of catalogs most frequently adopted, so that the student should now have a fair understanding of what the catalog can do for the reader, and what it means to have a collection of books classi-

fied, organized, and made ready for quick and effective use.

In the following two chapters the student will be brought into closer relations with the mechanical processes involved in handling books and catalog cards. This chapter will give the routine which might be followed in a well organized catalog department so that the student may have some idea of (1) the quantity of work to be done, (2) its organization, (3) the care which must be taken to guard against waste of time and effort, and (4) the means used to accomplish economic production without sacrificing quality.

It is through this insight into the work carried on behind the scenes that one comes into possession of data and information necessary to deal properly with a like situation; and is able to visualize a specific procedure and to apply knowledge already gained through other channels to this phase of the cataloger's problem.

This routine may seem too elaborate, and it probably would be found so by an individual library, but so much depends upon the systematising of work in this department where a flaw in the routine may block the flow of books, that it is given in full with the understanding that many of the processes stated can be combined or even cut out.

II. The Problem

Routine in a catalog department must be evolved (1) to get the books classified, cataloged, and on the shelves, and (2) to get the cards made and filed in the various catalogs.

The procedure here described will be limited to the routing of *current* work. No consideration will be given to blocks of books such as come as gifts or by special purchase; nor will the "back work" be included. The problem of routing, or feeding in other than current work, is one which must be solved by each library, since its solution is dependent on the amount of work involved, the size of the staff, the demand for the books in question, and the state of the budget.

In the small library, where the care of the whole collection is in the hands of one or two persons, the problem of routing is much simpler than in a large library, but care must be taken

to avoid handling the book more times than necessary and to be sure that the books in great demand are rushed through, and that none are overlooked entirely. The librarian of such a library may find this section suggestive even though many of the steps are unnecessary for him.

We shall, therefore, consider in this chapter a library of 100,000[1] volumes or over, and shall assume that Library of Congress cards are to be used as far as possible. While it is understood that this routine must be based on an imaginary library, the student should keep always in mind the fact that any such procedure may have to be varied to fit into an organization where different policies of administration will present divers needs. Justin Winsor gave some very sound advice to librarians on this topic when he said:

> "You must not be surprised to find some diversity of views among experts. They arise from different experiences and because of the varying conditions under which a library may be administered. The process of one library can rarely be transplanted to another without desirable modifications, arising from some change of conditions. . . . Choose that which you naturally take to; run it, and do not decide that the other is not perfectly satisfactory to him who chose that. Whichever you have chosen, study to improve it, and you will probably do so, insofar as it becomes fitted more closely to the individuality of yourself and your library." [2]

III. The Routine Process

1. Forwarding books for cataloging. Books are forwarded to the catalog department from the order department. We shall assume (1) that the books have been accessioned (if this process is followed), (2) that the books bear marks indicating the collections to which they belong, as Branches, School divisions, Departmental libraries, (3) that the mark of ownership of the library appears on each book, and (4) that L. C. printed cards have been ordered.

[1] A library of this size is chosen because it includes the major problems affecting routing. See thought questions at the end of this chapter.

[2] Winsor, Justin. A word to starters of libraries. Library Journal 1:1-3. September, 1876.

a. Rush books. All libraries, even small ones, need to consider the demands which must sometimes govern the priority of output from the catalog department. Books reserved or needed for a definite group of persons should be cataloged as soon as possible. A colored rush slip placed in the book before it leaves the order department will show at once that the book must take precedence over other material. Each library must determine what classes of books will fall into the "rush" group, and the cataloger must constantly be on the alert to make exceptions for other books not so included when a special demand may arise. An even balance must be kept (1) so that one department of the library, or one department of a university, shall not receive all the favors, and (2) so that the regular routine of work will not be continually blocked by "hurry up" work.

b. Groups of books. Some way must be found for locating books in process. The arrangement of such work depends upon the bulk to be handled. The library of average size can adopt the alphabetical arrangement by author and title for books in process, but in the larger libraries a more elaborate arrangement may be necessary. Each library will naturally need to make its own rulings.

The public library may divide its books into the following nine groups:

(1) *Fiction.* (a) New titles, (b) Added copies, including those for Central library, Central and branches, Juvenile collection, School division, Stations or other agencies.

(2) *Classed books or non-fiction.* (a) New titles, (b) Added copies, including those for Central library, Central and branches, Juvenile collection, School division, Stations or other agencies.

(3) *Rental books, Serials, Books for foreigners (divide by language), Gifts, Pamphlets.* Books in each of the above groups may again be arranged by date of receipt or by author and title. The date arrangement is especially desirable for added copies. A colored slip, placed in each book to indicate the month when the book was received, will serve to show the cataloger what books he must push through to completion by

the end of a given month. For example, six colored slips may be used for the twelve months of the year, as

January	*Yellow*	July
February	*White*	August
March	*Red*	September
April	*Green*	October
May	*Blue*	November
June	*Brown*	December

By collecting, just before April first, for example, all books bearing a red slip, the cataloger can be assured that all books received in March are cataloged. Some libraries make the time period a week instead of a month. They receive from the order department the accumulation of one week and send these books through, cataloged and recorded, by the end of the sixth day.

(4) *Fiction (new titles)*. By new fiction we mean titles which have never been in the book collection before and for which there are no catalog entries. Fiction takes the most simple form of cataloging, and since in many libraries it is given no class number, it does not have to go to the classifier. Libraries giving class numbers and subject headings to fiction, or writing annotations, must naturally change the method of handling these books; otherwise, they can safely be given to a cataloger of little experience, or even to a clerical assistant, to record for the catalog and the shelf-list.

(5) *Classed books or non-fiction (new titles)*. By new non-fiction or classed titles we mean all titles, other than fiction, which have not been in the book collection before, and for which there are no catalog entries. Since books in this group have subject value, they may be sorted by broad subject and arranged alphabetically by author under these classes, so that each cataloger can find easily the books for which he is responsible, or they may be arranged according to processes in the following groups: (a) books for which L. C. cards have been received, (b) books for which L. C. cards are available, but not yet received, and (c) books for which no L. C. cards are available.

Both fiction and non-fiction books may be divided into groups for (a) Central library, (b) Branch libraries, (c) Juvenile collection, (d) School division, (e) Stations or other agencies. Since books in groups (b)–(e) are largely duplicates of those in the central library, the routine for these belongs with the procedure for added copies.

(6) *Added copies.* By added copies we mean duplicate copies of titles already in the book collection which are either cataloged or in process of cataloging. These do not have to be forwarded to the cataloger, since the titles are already in the catalog and shelf-list. They can go direct to a clerical assistant who follows a special routine developed in the next chapter.

(7) *Serials.* Many publications issued in successive parts, such as Annual Reports, Year-books, Monographs belonging to a special series, fasciculi, hefte, etc. (except regular current periodicals), are forwarded to the catalog department after checking.

(8) *Gifts.* Gifts may be considered under the following groups: (a) Books received in quantities from the same source; (b) Books received one at a time; and (c) Serials. Those in the first and second groups should be looked over by the head cataloger or reference librarian to determine which volumes may be needed for early use and which may be held until there is a slack time. If gifts are to be kept together as one collection a plan must be worked out for their special cataloging and arrangement. They will frequently have to be held intact until such a scheme can be prepared. Every effort should be made to avoid keeping together books of a gift collection.

The gifts in the third class should be treated as any other serials are treated, the duplicates being disposed of as each library sees fit.

(9) *Pamphlets.* There is a great temptation to push the pamphlets into an empty shelf and let them accumulate until they are quite beyond use. The ideal method is to sort them as soon as they are received, treating as books those which have any real permanent value, and treating the others according to

a definite plan which the library should work out. Pamphlets valuable enough to bind should go through the regular process with other new books.

One of the most common ways of treating ephemeral material which is not fully cataloged, is to classify each pamphlet broadly, put the pamphlets in boxes, and shelve at the beginning or end of each class. A brief author card is made for each pamphlet and filed either in the main catalog or in a list apart, called the "Catalog of pamphlets." By this method all pamphlets are shelved so as to be accessible by subject and can be located by author through the catalog. A subject card may be added to the catalog covering the whole box.

Boxes of pamphlets should be examined rather frequently to see what out-of-date material can be discarded, and to gather together the accumulation on one subject and bind into volumes. When bound they are cataloged according to the routine for new books. It is best to catalog independently each important pamphlet in the volume.

Pamphlets kept in vertical files are usually listed and cared for by the reference department.

2. Routine of classification and cataloging. Assuming that the books are now in the hands of the catalogers, we may proceed to the methods of routing the individual book. At this point there will be a divergence in procedure, depending on the use of L. C. cards, and the time and methods followed for ordering them.

a. Fiction. Most libraries think it best not to use L. C. cards for fiction as the only real question in cataloging fiction is to discover the correct names of authors and to give attention to possible changes in titles. The process after this point is simple. Most public libraries make a brief entry for such books. Author, title, publisher, and date of publication are the only items used, with contents notes for books of short stories. In large libraries where there are many editions of the same novel and the collection is used by university students, fuller entries are made.

The procedure for fiction is as follows:

(1) If the author's name on the title-page is perfectly

familiar to the cataloger, as Thomas Hardy, the book number is assigned, if used at all, and the catalog card and shelf card are made at once, the assistant typing the cards with the title-page before him. If the title is for less than five catalogs, the title cards are typed at the same time. If for more than five catalogs, a card is made for the duplicator.[1]

(2) If the author is not known, the name must be identified in the official or public catalog. If the name is not in the catalog it must be searched in biographical dictionaries, other catalogs, current indexes, Who's who series, or other reference books to establish the correct form and to make sure that a pseudonym has not been used which will necessitate the making of reference cards. One is not warranted in making exhaustive search for names of authors of fiction. Many libraries feel that modern writers of fiction need not be searched beyond *Book Review Digest* and *Readers' Guide*.

(3) An authority card is written which shows where the name was found.

(4) If book numbers are used these are now assigned.

(5) Make catalog cards and shelf-list cards as in number (1).

(6) The books and cards, with the exception of shelf cards, go to the reviser, who checks the work and forwards the books to be marked. Cards go to the filers, or to the duplicators. From this point the routine is the same as for non-fiction. Shelf cards go to the shelf-lister for statistics.

b. Classed books or non-fiction.

(1) *Preliminary search.* To aid the classifier and cataloger, a clerical assistant working under the direction of the cataloger does a certain amount of routine work preparatory to establishing the form of entry, such as arranging L. C. cards alphabetically by author and matching them with the books.

The cataloger in the meantime examines all books having no L. C. cards and indicates the tentative author entry and all necessary added entries. The assistant then makes a *Process slip* for each of these books. This slip contains the author's name (as full as possible), title, imprint items, and such colla-

[1] See Chap. XVI.

tion as the library uses, the tracing for any added entries which the cataloger has indicated, and the location of the books in branches or special departments.

The process slip (also called in some libraries routine slip, copy slip, guide slip, etc.) is a slip, or card, of the same size as a standard catalog card (preferably of a different color) which accompanies the book on its rounds through the catalog department. Some libraries use a form card for the process slip. The first person who receives the books after they are sorted supervises the making of this slip, and each person handling the book thereafter adds any data which will aid either in the interpretation of the book or in the use of bibliographical information for properly cataloging and classifying it. When the book has reached the point of final revision, this card should contain all indications necessary to catalog the title fully, and should also show the location of the book in the library system so that the proper number of cards can be made for all catalogs. This process slip is usually used as copy for the printer, the multigrapher, or the typist. No separate process slip is made for books having L. C. cards.

(2) *Searching in the library catalog.* The assistant searches each entry in the catalog to see (a) if the *same author* is in the catalog, and if so, to copy the form and fulness of name; (b) if the *same title* is in the catalog, and if so, to locate duplicates or other editions; (c) if there are any *differences in the books* which need further investigation; and (d) *to copy the class numbers* of other books by the same author as an aid to the classifier (in large libraries only).

As a result of search the work falls into the following groups:

(a) All books found to be new editions or duplicates are forwarded for recording. The routine for these is described in the next chapter. (b) New books by authors already in the catalog are immediately forwarded to the classifier, since the author's name has previously been established. (c) New books by new authors, having L. C. cards, are forwarded to the classifier, as most libraries are willing to accept the fulness of the author's name as printed on the cards. (d) Books hav-

ing L. C. cards which do not agree with the books are turned over to a clerical assistant and process slips are made to accompany the L. C. cards in group (d). (e) Books for which no L. C. cards are available and for which further bibliographic search must be made are forwarded to the cataloger.

(3) *Classifying.* In some libraries both classification and the assigning of subject headings are done by the classifier (see chapter on organization); in others the catalogers assign the subject headings; while in others classification, cataloging, and subject heading work are done by each assistant. We shall assume here that the classification and subject heading work are in the hands of one and the same person, and that the cataloging alone is done by the catalogers.

Classification routine. The classifier (a) makes a study of each book; (b) determines its place in the classification scheme (if a series, designates whether it is to be kept together, or separated and each volume classified separately); (c) examines the shelf-list to see if like books have been classed in the same place; (d) examines the process slip to see where other books by the same author may have been classified; (e) checks the L. C. class number on the L. C. card (if the L. C. system is used) or pencils another classification number on the bottom of the L. C. card or on the process slip; (f) indicates any analytical numbers for the classified catalog or shelf-list; (g) assigns subject headings; (h) checks the terms chosen with the official list of headings kept by the library; (i) indicates, by writing on a separate slip, or on the process slip, any cross-references necessary and checks these; (j) if the subject heading is *new,* designates it on the process slip so a card will be made for the official list. (See also Chapter IX.)

Classifier then forwards the books as follows: (a) Books with L. C. cards pass on to the reviser for approval before cards are finally prepared for the catalogs. (b) Books with process slips, but with no L. C. cards, are completed by the cataloger and passed on to the reviser.

(4) *Cataloging.* The subject value of the book has now been settled and the classification symbols and subject head-

ings have been assigned. The cataloger, being in possession of all items gathered in the preliminary search and all decisions of the classifier, proceeds to prepare the process slip in its final form for duplication.

(5) *Revising books and cards.* The work of all catalogers should be revised, but this does not mean that each cataloger must not revise his own work as it is done. Some one person who can correlate things must see the finished work after several assistants have had a hand in it. The final reviser knows the catalog as a whole and is, therefore, in a position to unify the work of all assistants. Even the most accurate worker will at some time, because of interruption, lapse of memory, or some other cause, make mistakes. Errors should be caught at this point in the routine before cards are duplicated.

The inexperienced reviser will make for himself a list of all the items which must be noted during the process of revision, but the reviser who is accustomed to this work and who is perfectly familiar with the library routine, as well as with the capacity of each cataloger, will use his judgment and revise with discretion.

(6) *Shelf-listing.* This duty follows the revision of the catalog cards, because the book number is based on the catalog entry. In some libraries shelf-listing is done by the catalogers when they are handling the book.

The shelf-lister makes a temporary shelf card (if L. C. cards are to be used and are not yet available, or if cards are to be multigraphed and one of the unit cards is used for the shelf-list), or a typed permanent shelf card following information as given on the process slip. The entry on the shelf card is usually brief if typed; that is, author's surname, with initials only, brief title, edition, date of publication, number of volumes, accession numbers (if used), copy numbers if more than one, and call number. Binder's title may be added after the title-page title for fiction.

At the time the shelf card is made, a duplicate card is written and filed at the desk of one of the assistants. As books are completed and ready to leave the catalog department, cards

corresponding to the books are drawn from the file, stamped with the date, and filed either in the public catalog or at the circulation desk, where they remain until replaced by complete sets of cards.

The shelf-lister (a) assigns the book number (provided the classifier has not already done so), (b) pencils the book number in the book below the class number, (c) searches the call number in the shelf-list to make sure that it does not duplicate one already there, (d) makes a distinction in numbers if a duplicate number is found, (e) adds the call number to the shelf card and to the process slip, (f) arranges shelf cards by class number and holds them for statistics, (g) sends L. C. cards with process slips to the typist, (h) sends process slips to be duplicated or typed.

If the shelf-lister is an accurate person, this work need not be revised, since the very fact that the shelf-list must be consulted for every entry insures little chance of error. It is economy to select a very dependable assistant for this work.

(7) *Separating books and cards.* After shelf-listing is completed the books and cards are separated, the books going to an assistant to be marked and prepared for the shelves, and the cards going to filers, duplicators, or typists.

(8) *Marking and forwarding books.*[1] In some libraries the mechanical preparation of the books is one of the duties of the catalog department. It will not, however, be so considered in this text.

(9) *Forwarding and duplicating cards.* The process slips now become the copy for the printer, multigraph operator, or typist, who, working from these cards, makes as many duplicate cards as are needed fully to catalog the book. (See Chapter XVI.) Copy for the first card must be proof read before duplicate cards are run off. Reference cards are copied at this point, if new. If they are to be added to cards already in the catalog, the slips are sent to an assistant who makes the additions.

(10) *Adding headings to L. C. cards.* The L. C. cards

[1] Drury, F. K. W. Book selection and acquisition. A.L.A. (in progress).

which can be used as printed go to the typist who, following directions, types the headings on the tops of the cards. As each card is prepared the tracing on the official card is checked to show that heading has been written.

(11) *Correcting L. C. cards.* The typist, working from the slip on which changes are noted, makes the corrections on the L. C. cards, then proceeds to add headings and call numbers as above.

(12) *Revising typed headings.* The reviser, following directions on the process slip, revises the headings and call numbers which have been typed.

(13) *Arranging cards for filing.* After cards are ready, a sorting board can be used to facilitate their rapid and accurate distribution. This board is of heavy cardboard blocked off into squares a little larger than a catalog card. Above each square is noted the name of the catalog and the cards which go into it. The board is a constant reminder to the card sorter of the several files needed.

Official catalog—Author only	Reference catalog—All cards
(*Throw cards here*)	(*Throw cards here*)
Juvenile cards only	Medical library
(*Throw cards here*)	(*Throw cards here*)

Section of a sorting board

Cards are arranged alphabetically for all catalogs except those for classified files which require class number arrangement. They are then placed back of guides which indicate their final location to await filing into the catalogs.

(14) *Revising finished cards.* Cards for the main catalog may be examined by the head of the department just before they are filed. They are then sent to the filers.

(15) *Filing and revision of filing.* Importance must be placed on correct filing, because a card once misfiled is probably lost. Alphabeting into the catalog should be done by one person and revised by another, if possible. In some places head catalogers do the final revision, in order to see how the entries in the catalog are lining up. It is an excellent way to keep in touch with the catalog. Alphabeting is treated in Chapter XI.

3. Statistics. A record of the work done may be taken at any one of the following points:

The preliminary searcher counts the number of process slips made
The classifier counts the number of class numbers assigned
The classifier counts the number of subject headings assigned
The catalogers count the number of titles cataloged
The revisers count the number of titles revised
The revisers count the number of cards typed
The revisers count the number of cards multigraphed
The shelf-listers count the number of books added by classes
The shelf-listers count the number of book numbers assigned

Probably most libraries will not need all of these statistics, while some few may need more.

In some libraries the statistics are compiled from the process slip by an assistant who is in charge of statistics, or by the shelf-lister. As the recording of statistics by each worker is rather a time-consuming process, the count from the process slip is a means of relieving the cataloger of such routine, and at the same time of securing a more uniform record.

The next chapter will show how added copies and new editions are routed and recorded.

References

American Library Association. Classification and cataloging (including the routing of work through the catalog department). In its Survey of libraries in the United States, 1927, v. 4, p. 108–18.
Includes routing in the public libraries of Cleveland, Indianapolis, Omaha, in the University of North Carolina and in Oberlin College.

Use of process slips, or "travelers." Bulletin of Bibliography 8:35, 1914.
Describes process slips as used in some public libraries.

Thought Questions

1. Change the routine outlined in this chapter to apply to a smaller library where the cataloging and classification are carried by one cataloger and one typist who also acts in the capacity of a clerical assistant.
2. Change the routine, as outlined in this chapter, to apply to a library where the subject headings are assigned by the cataloger rather than by the classifier.

Chapter XIV

Added Copies. Added Editions. Continuations. Transfers. Withdrawals

I. Replacements
II. Added Copies
  1. Union shelf-list
  2. Union catalog
  3. Central distribution division
  4. Records for extension collections
  5. Routine for added copies
III. Added Editions
  1. Distinction between added copies and added editions
  2. New editions
IV. Supplements
V. Indexes
VI. Continuations
  1. Addition of holdings to the catalog
  2. Addition of contents
VII. Transfers
  1. Cards
  2. Books
VIII. Withdrawals
  1. Reasons for withdrawing books
  2. Frequency of recording withdrawals
  3. Replacement and withdrawal records
  4. Withdrawal routine
  5. Alternative methods
  6. Withdrawal book

In the last chapter a new title was traced through different processes as it passed through the catalog department. The cataloger's duties do not cease with the new titles. In public libraries these form the smallest number of the books handled in a year, the greater bulk being those replacing and augmenting copies already in the collection which are (1) purchased to replace worn out and discarded books, or (2) bought to supplement copies which are needed to supply a demand for certain much used works.

The ratio of duplicate titles as against new titles added to the public library increases with the size of the library and the number of outside agencies[1] that library is serving. In large libraries like Cleveland (1,100,000 volumes) and Pittsburgh (667,736 volumes) the new titles average less than ten per cent of the total number of volumes that pass through the catalog department annually, while in a library the size of Brookline, Massachusetts (122,000 volumes) the percentage of new titles, covering a period of five years, was fifty per cent of the total number of books handled. These figures show that nearly all public libraries doing any extension work will always have the problem of handling a quantity of books which have already been classified and cataloged, but which must be recorded before they are put into circulation.

University libraries have the problem in a lesser degree in handling added copies purchased for class and laboratory use, and copies added to departmental libraries which are auxiliary to the central collection.

Thus the bulk of the books passing through the catalog department of the medium and large public libraries and others doing extension work, are thrown into what may be called a mechanical group. It is in the treatment of these books that the greatest economy can be applied, provided that efficient methods for routing and recording are evolved. Every safety measure must be used to detect new and changed editions, but when the book is clearly a duplicate of one already in the collection, its treatment is mechanical.

Clerical assistants can be taught efficient methods for adding to records, and neatness and accuracy in doing this work. The teaching process is simple, for no principles of cataloging are involved. Every student of library science should be conversant with the methods used because, even if not called upon to do the work, he must know the steps to be followed in order

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[1] The phrase "outside agency" is used here in its broadest sense to mean any distributing or service center other than the central collection. It is intended to include branches, stations, school collections, department libraries, separate reading rooms, and other collections allied to the central library.

to understand the administrative problems of the catalog department.

Books falling into this mechanical group are here considered under the following heads, which will be defined to avoid any confusion in the use of terms:

Replacements. The term replacement is used to designate a title or volume which has been ordered for the library to replace one of like kind. Replacements may turn out to be added copies, or even added editions.

Added copies. Added copies are duplicates of titles already in the book collection which are either cataloged or in process of cataloging.

Added editions. Added editions are new or changed editions of books already in the collection. They may be so changed in date, content, or form that it is impossible to treat them as duplicates or added copies. A supposedly added copy may prove to be a new or different edition, and must be treated as a new book.

I. Replacements

The largest number of replacements are added copies, but frequently a book is replaced by a later edition, in which case the book must either be cataloged as a new book, or be added to the catalog cards for the old edition. In the latter case the book becomes, in library parlance, an *added edition.* The phrase "Do not replace" is frequently stamped on the shelf record to guard against adding titles not worthy of duplication.

II. Added Copies

The discussion of added copies necessitates a definition of the union shelf-list and of the union catalog.

1. Union shelf-list.[1] This term is used for a shelf-list in which is recorded the location of all *copies* of all books in the collection. Here is brought together in one place a directory of the books which make up the library. They can be traced to branches, departments, stations, and other agencies, since the card for every title indicates for each copy its place in the library system.

The shelf-list record for each title in an outside agency is

[1] The shelf-list is treated in Chap. VI.

kept on a card separate from the central shelf card, but it is filed in the union shelf-list immediately after the central card for the same title. It is a convenience to have a colored card for the outside agencies.

2. Union catalog. Some libraries also show *title* location on the official catalog card as well as on the shelf-list record, in which case this catalog becomes a union catalog. The advantage in having the official catalog serve as a directory rests in the fact that the members of the staff find it quicker to consult one alphabetical file than to search the call number in the catalog and then pass on to the shelf-list. When independent catalogs are kept up in agencies outside of the central library building, as branches or departmental libraries, it is a convenience to the catalogers to have the location of titles on the official catalog card, so that catalog cards for these agencies can be checked. For deposit collections, for which no independent catalog is provided, such a record is not necessary.

Most libraries must be content to show *copy numbers* on the shelf-list only. These are not necessary on the official catalog cards. Location designation is sufficient. Some university libraries show the location of titles (with call number) in the public catalogs, but it is a very expensive procedure to keep adding such information to the catalog cards. Most libraries must be content to have this designated on the official catalog and shelf-list cards only.

3. Central distribution division. Should the library be organized with a central distributing or charging division, the records of added copies become much simplified, for in that case the books are all cataloged and shelf-listed for the central library and distributed by means of a charging system. The charging system, instead of the official catalog or shelf-list, then becomes the directory of these books. This method is inadequate if separate catalogs are maintained for the borrowing agency unless some scheme of traveling catalog cards (page 262) is worked out. It is a method to be discouraged except for extension departments where a very free exchange of books between agencies is desirable.

4. Records for extension collections.

a. Catalogs. Independent catalogs are usually deposited in each branch library where the book collections are more or less fixed, and also in departmental libraries or special reading rooms. These catalogs are compiled by making duplicate sets of the cards for like titles already in the catalog of the central collection. Some libraries use the same fulness of name and the same subject headings in all catalogs; others make changes for the catalogs for outside agencies.

It is not customary to make independent catalogs for books sent to schools, county libraries, traveling libraries, and other shifting collections. A shelf-list, used in combination with a charging system, takes care of these books. If school libraries are maintained by the central library, their catalogs will then be made at central, just as branch catalogs are made.

Some library extension workers are now using *traveling catalog cards*. This is a card furnished by the central library or office, giving all specifications for subject headings and added entries. The card goes with the book. The agency borrowing the book can make copies of this card, add the headings suggested, and so have a catalog of the books on deposit at that agency.

b. Shelf-lists. Each branch usually has a shelf-list of its own collection. It is a necessary record when revising shelves, when replacing books, when building up the collection, and when taking inventory of the branch collection. This is kept up either by direction from the central library, or by assistants at each branch.

Duplicates of the union shelf-list are frequently made for special extension collections showing the titles and number of copies available in the collections. The upkeep of this shelf-list is left to the independent agency.

5. Routine for added copies. A public library replaces hundreds of titles which can be put through the catalog department without comparison with the catalog to detect changes in edition. Works of fiction, most juvenile books, standard editions of books for schools, and similar books are so familiar to the assistants that they can be passed on with

safety. There are, however, certain kinds of books which should be carefully scanned and compared with the catalog before they are accepted as duplicates of copies already cataloged. Among these are scientific works and others which do not belong to the fiction or the juvenile groups of replacements. Assistants should be given definite directions as to what classes must be compared with the catalog. University libraries will naturally require particularly careful search at this point.

When added copies are received, it is convenient to divide them into at least two groups: Adult and Juvenile. In some libraries the call number is entered in the book in the order department, or order cards bearing the call number are sent along with the books so that additions can be made at the shelf-list without reference to the catalog. If twenty copies or more bear the same call number, it is economy to set up the call number in rubber type, revise it, and stamp it on the back of the title-page of each book. This can be done by a clerk even before assistants are ready to record the books, putting them back on the shelves to be handled quickly when assistants can take them. The routine proceeds as follows:

a. Additions to the shelf-list.[1] (1) Arrange the books on the truck in shelf-list order, all copies of the same book together; (2) Give the next consecutive copy numbers to the books and write this below the call number on the back of the title-page; (3) Check the copy number on the shelf card or add to the card. Also add the accession number.

If no accession number is used, much time can be saved by using a form card on which consecutive copy numbers are printed (page 264). As a new copy of a book is received the printed number is underscored, and as a copy is withdrawn a line is drawn through the number. By using this card the copy can be added or changed by a stroke of the pen, without removing and refiling the cards.

[1] *Note.* Some libraries no longer add each copy number of a book for an outside agency to the union shelf-list, but keep there the whole number only of copies for the agency. This materially lessens the work of adding as well as withdrawing titles. It is a plan which should be considered.

817 128r3
Irving, Washington. Rip Van Winkle, and The Legend of Sleepy Hollow.

1 7 13 19 25 31 37 43 49 55 61 67 73 79 85 91 97
2 8 14 20 26 32 38 44 50 56 62 68 74 80 86 92 98
3 9 15 21 27 33 39 45 51 57 63 69 75 81 87 93 99
4 10 16 22 28 34 40 46 52 58 64 70 76 82 88 94 100
5 11 17 23 29 35 41 47 53 59 65 71 77 83 89 95 101
6 12 18 24 30 36 42 48 54 60 66 72 78 84 90 96 102

Numbers are continued on the reverse side.

(4) Note titles "new" for agencies. If the title is the first copy to be added to a branch or other agency having its own catalog and shelf-list, a slip must be made of author, title, and call number so that catalog cards may be prepared for the agency. Pass this slip on for ordering cards.

(5) Take count of the number of books added in each class by counting the books on the truck, and pass the books on to be marked and forwarded. (If new assistants are recording added copies the work must be revised, but if an accurate assistant with experience is doing the work, revision is unnecessary.)

(6) When the books arrive at the department or agency, records are made on the shelf-list of that agency.

III. Added Editions

When a book ordered as a replacement turns out to be a new edition, it is usually very acceptable to the library and would have been ordered had it been known. Often it is the only edition available, others having been exhausted. If the new edition is one which replaces a copy in a branch or other agency and is not already in the central library, the catalog department should notify the department interested, e.g., the Technology department, of the new edition, so that a central

copy can be ordered if desired. A printed form card can be used for this which reads as follows:

> A new edition of.....
>
> which is not in central has been received for
>
> .....and is held in
>
> the catalog room for your inspection.

1. Distinction between added copies and added editions. Some public libraries do not consider a book an added edition if it differs only slightly from other copies of the same title, but enter it as an added copy. Fiction is usually so treated, but those libraries doing exceptionally careful cataloging are particular to make a distinction between editions even though the difference does not affect the content of the book. Often a book is reprinted with a new title-page which bears a date later than that of other copies of the same book; in this case, the reader may continually demand the book bearing the new date, especially if he has seen an announcement of the reprint. This is likely to be more frequent in technical books, and the users of these books are not satisfied until they themselves see that the text of the book has not been changed. In a case of this kind the cataloger is forced to recognize the book as a different edition.

2. New editions. New editions may be cataloged as new books, or they may be added to cards already in the catalog for previous editions. The practice of cataloging each edition as a separate entry is probably the most satisfactory method for a card catalog if Library of Congress cards are used. If, however, there are a great many editions of one title, it is economy to make author cards complete, but not to keep adding the various editions to the added entry cards; instead make references from all added entry cards to the

main author card where all editions in the library will be listed. Reference may be applied to added entry cards by a rubber stamp:

For other editions see _____(author's name)_____

Usually the new edition can be given the same class number and the same subject headings, but must have a distinguishing book number; however, changed editions should always be very carefully examined to detect changes and additions calling for added subject entries or analytical entries. The very fact that new subject headings are frequently needed for revised and enlarged editions, makes it advantageous to catalog each edition on a separate card.

IV. Supplements

Supplements cannot always be treated as independent entries because they are closely tied up with the work to which they belong. They may be considered in two different groups, and defined as (1) a part of a book which is joined to a principal part, or to the whole; in other words, a complementary volume which may or may not have an independent title-page; (2) a part, sometimes of different size from the whole, which is added to a journal whose ordinary extent is insufficient for the subject treated. Supplements to journals usually take the form of monographs, e.g., *The story of a New England farm house,* by B. E. Austin, which was issued as a supplement to the *Massachusetts Magazine of Historical Research,* v. 12, No. 3, 1883.

A supplement of the second type should be cataloged separately. It may classify and shelve with the set to which it belongs, or be shelved separately. If classified separately, it must be added to the shelf-list of the journal with a note of its own class number, and must have an independent shelf card as well.

A supplement which is an integral part of the whole work should be classified with that work and be added to the main card in a note. As an example we may cite the *A.L.A. index; an index to general literature to Jan. 1, 1900,* issued in 1914. In this case it is much better to have the supplementary volume

added immediately after the volume which it supplements. All catalog cards must be removed and the new volume added. Unless the supplement is volumed as a part of the set, it must be given a distinguishing book number which will bring it directly after the main work on the shelves. (Fellows, p. 200.)

V. Indexes

Indexes to works issued in several volumes may be issued as a part of a volume of the set or as an independent volume or volumes. When included in another volume, the fact should always be given in a note or as an analytical entry added to the cards for the main work. Separate index volumes should also be added to cards. The Library of Congress is now printing separate cards for indexes for serial publications in progress, and is adding the word *Indexes* as a part of the heading to distinguish index entries from main entries, e.g., Société de linguistique de Paris. *Mémoires* (*Indexes*). When the serial is complete, these index volumes are added to the card for the complete set and the printing of the separate index entry is discontinued.

VI. Continuations

1. Addition of holdings[1] to the catalog. The term "Continuations" is here used to include Periodicals (complete volumes); Annuals, etc.; Reports; Works issued in parts of less than one volume.

Three different methods are used for adding continuations to catalog cards already in the catalog: (1) An *open entry* card can be used and the holdings of the library be entered in pencil. As new volumes are received these pencil notations are changed, thus keeping the card always up to date. (2) This same open entry card may show only the earliest volume or number in the library, after which *to date* (Library of Congress uses the phrase "in progress") is entered in pencil. This phrase is used to show that the publication is being received as printed, and that the latest published volume is probably

[1] The term "holdings" is used to describe the volumes or parts of a serial in the possession of the library. It is used here as being a term more euphonious and more definite than the phrase "Library has."

available. It is an indefinite entry but the reader may consult assistants as to the latest number actually in the library.

Library has those checked				
1871	1881	1891	1901	1911
1872	1882	1892	1902	1912
1873	1883	1893	1903	1913
1874	1884	1894	1904	1914
1875	1885	1895	1905	1915
1876	1886	1896	1906	1916
1877	1887	1897	1907	1917
1878	1888	1898	1908	1918
1879	1889	1899	1909	1919
1880	1890	1900	1910	1920
Used for Annuals				

(3) The open entry card may be used, with an additional card following it, showing the actual holdings of the library. This second card is usually a form card on which are printed numbers or years; these can be checked to show just what publications are available. Cards showing holdings are very convenient because additions can be made without removing

Library has those checked		
1	11	21
2	12	22
3	13	23
4	14	24
5	15	25
6	16	26
7	17	27
8	18	28
9	19	29
10	20	30
Used for numbered publications where date is also desirable.		

the card from the catalog, and they give definite and up-to-date information. (See form card page 268.)

As a matter of fact, most libraries use all three methods mentioned above for recording continuations, depending on the publication to be cataloged. Some libraries send their readers to the check-list[1] instead of using the holdings card. This saves much work on the part of the catalogers, but it is often a great annoyance to readers unless the check-list is filed as an adjunct to the catalog. Too often the check-list is in another part of the building from the catalog and reference to it is inconvenient.

Additions to be made to the catalog should be allowed to accumulate until additions to several sets of cards can be made at the same time. Statistics should be kept of these additions for they represent a great deal of work and occupy a great deal of time.

2. Addition of contents.

a. To the catalog. If the contents of volumes or parts of a continuation have been added to the cards, the cards must be removed and the title of the new part appended. To save unnecessary work the contents may be kept complete on the author card only, and a reference made to this card from all subject and added entry cards. Use a rubber stamp:

For full contents, see card under

(author's name or name of continuation)

b. To a contents-book. Should the contents be too long to add to catalog cards, a loose leaf contents-book can be kept. Add contents to this and make reference from the catalog cards, e.g., "For full contents *see* Contents-books kept at the reference desk." Use one sheet, or page, for a single main entry, adding call number; write in contents as designated in the book, or, in case of a continuation, use number of publication followed by title. Such a list of contents is very valuable in

[1] The check-list referred to is an official record on which is noted the receipt of each number, or part, of a continuation as it comes into the library.

answering a request for a publication having a definite numbering, when the title is not known, as "Bulletin No. 20 of the Carnegie foundation for the advancement of teaching."

VII. Transfers

Libraries maintaining collections auxiliary to the main book collection often want to transfer a book from one collection to another, that is, from one branch to another, from one school to another, from one department to another, or from one of these agencies to the "surplus stock" collection at the main library. This is not very difficult if cataloging is centralized, but without centralized cataloging the question of transferring books becomes very complex, in fact, almost impossible. If each agency classifies and catalogs its own books and keeps its separate shelf-list, there can be no uniformity in call numbers nor in copy numbers, making it prohibitive to transfer the books and have them fit into another collection, or to make use of the catalog cards. This is one of the strong arguments in favor of centralized cataloging. By having a union shelf-list, the catalog department can make the transfer of books and records and at the same time keep complete both the union records and those at the separate agencies. The following routine will show how this can be done.

1. Cards.

(a) Notice comes to the catalog department of the title to be transferred, giving author, title, edition, date, call number, accession number, copy number, present location of book, and name of new agency to which it is to be transferred. (Use a printed form.)

(b) The catalog department removes location marks from all catalog cards and shelf-list and adds the new.

(c) If the transferred book is the last copy of that title in an agency maintaining an independent catalog, a notice is sent for return of catalog cards and shelf card.

(d) These cards are then forwarded to the new agency, or new cards are prepared.

(e) Statistics are kept of transfers.

2. Books. If books bear the name of the agency, this

name must be crossed off and the new one substituted. One library uses a check card, listing all changes to be made in cards and books when a book is transferred. This when completed shows that all records have received attention.

Some agencies send catalog cards and transfer slips with the book to be transferred, and all changes of record and marking on books is done by the catalog department. In this case the transferred book is treated as a withdrawal from that agency, and as a new or added copy for the other.

The important thing to observe in transferring books is whether the book transferred is the last copy or not. If it is, all catalog cards must be withdrawn, and if not needed for the new agency, they can be filed for future use in the catalog department.

VIII. Withdrawals

A certain public library added 22,937 volumes to its book collection in one year, and during the same period of time withdrew 17,781 volumes, leaving a net gain of only 5,156 volumes. All catalog and shelf-list records connected with both the adding and withdrawing of these books had to be handled by the catalog department. This point is emphasized here because persons unfamiliar with the internal organization of a library are often unaware of the fact that the book collection is an ever-changing aggregation, and that it is the duty of the catalog department to show the ebb and flow of titles as they appear and disappear from year to year. Today the library may have fifty copies of *Alice in Wonderland* while in a month the supply of this popular title may have dwindled to twenty-five, and still the children are clamoring for more copies. A new shipment is ordered and the records soon show that thirty new copies are available, and so it goes from month to month and year to year. The life of a circulating book is often of short duration, but the records must go on forever.

The shelf-list record is the record most affected by changes made in the book collection, because it must show how many copies of each title are available and how many have been in the collection since the beginning of the library. In addition

to the record of each individual title, a count must be kept of volumes added and withdrawn each year in each class.

In order to keep an account of each title and also to furnish accurate statistics of the yearly change in the number of books handled in each class, a system must be worked out which will insure speed and precision without too much red tape.

1. Reasons for withdrawing books. The most common reasons for withdrawing books are: (a) worn out in use, (b) lost by the reader, (c) lost or disappeared from the shelves, (d) destroyed because of exposure to contagious disease, (e) mutilated, (f) out of date or replaced by a later edition.

If the library wishes to have a complete history of each copy of the books in the library, the reason for withdrawal must be indicated on the shelf card, in the accession book, or in a separate withdrawal book kept for this purpose. Symbols may be used to designate various reasons; for example, the letter L after the accession or copy number shows that the copy was lost. Such detailed information is used so infrequently that it has been discarded by most libraries. It may, however, be advisable to mark on the shelf-list the copies which have been lost and paid for by readers. The symbol Lp after the copy or accession number will serve as a receipt in case of dispute. Most libraries consider it sufficient to keep a count of the number of books withdrawn without indicating reasons.

2. Frequency of recording withdrawals. The best practice provides that the withdrawal records be sent to the catalog department from other departments once a month. This allows better planning and insures less handling of cards since the same title may come up for discard several times during a month.

3. Replacement and withdrawal records. There is economy in handling these records if the decision to replace the books can accompany the notice of withdrawal.

4. Withdrawal routine.

a. Book cards used as records. Great economy can be

attained if records already made can be used for forwarding information in regard to withdrawals, and the book cards can easily answer this purpose. These are removed from the books by the department or agency withdrawing them, and the books themselves are not handled by the catalog department. A book card is made for the sake of record if none is in the book.

Working from the book card, the agency or department pencils on it the number of copies available, which information is obtained from the shelf-list. The card is then forwarded to the librarian or department head for replacement decision. The book card then comes to the catalog department with the following information: call number (author and title in fiction), copy withdrawn, from what collection withdrawn, to be or not to be replaced.

b. Records on shelf-list. The book cards are arranged by call number except those for fiction which are arranged by author and title. A line is drawn through the accession number or copy number on the shelf-list.

c. Withdrawal of last copy. If the last copy has been withdrawn and will not be replaced, a note is made to remove all catalog cards. If the book is to be replaced, the cards remain in the catalog. As a check against the receipt of the book, the book cards for last copies to be replaced should be held and checked against the shelf card after one month.

Working from the notes made when last copies were withdrawn, the catalog cards are withdrawn if the copy is not to be replaced. These may be held in a tray marked "Withdrawn cards" and kept for future use, or destroyed. If the withdrawn copy is to be replaced, catalog cards are left in their places.

d. Statistical count. Statistics of withdrawals may be taken from shelf cards or book cards or books. It is economy, however, to take them from the book cards in order to avoid taking out the shelf cards and refiling them. The number of book cards in each class gives the number of withdrawals in that class. These numbers are then deducted from the total additions by class in order to get the net gain or loss of books.

The same plan is followed if shelf cards are used for counting statistics.

Some libraries make a record of all withdrawals in the accession book, but this process is considered obsolete.

e. Book cards discarded. After the book cards have served the above purposes they are destroyed, those for last copies to be replaced being held temporarily as noted above.

f. Corrections on catalog cards. If one volume of a set is withdrawn, this fact must be penciled on all catalog cards for the set, e.g., *v. 4, missing.*

5. Alternative methods. The plan outlined above is presented as one efficient way of handling withdrawals, but another method might be more advantageous to a library differently organized. In some libraries the books themselves are received in the catalog department, and from them records are made on the shelf-list. The process is then changed in certain particulars. A library not using book cards must employ other records in their place unless the books themselves are handled.

6. Withdrawal book. The withdrawal book, which records all the titles withdrawn, with reasons, is not usually kept by the catalog department, and is therefore not described here. Its value is questioned when one considers its probable use in comparison with the work entailed in keeping it up. Most libraries no longer attempt to keep such a record.

References

American Library Association. Survey of libraries in the United States. A.L.A., 1927. Departmental catalogs, v. 4, p. 72–80; Branch catalogs, v. 4, p. 83–86.

Fellows, Dorkas. Added editions, indexes, keys, supplements, atlases, and portfolios. In her Cataloging rules. Wilson, 1922, p. 192–97. How to enter these on the catalog card. Model cards are given.

Gammons, A. F. Branch cataloging minus red tape. Public Libraries 27: 474–75. October, 1922.
The routine followed by the Detroit Public Library.

Halgrim, Mrs. Hazel. Methods of withdrawing books. Library notes and news [issued by Minnesota Department of Education] 9: 8–9. March, 1928.

Herrman, Jennie. County libraries and their catalog problems. A.L.A. Bulletin 14:151–55. Papers and Proceedings, July, 1920.

The cataloging process used by the San Diego County Free Library. Suggestive and practical.

HITCHLER, THERESA. Added editions, supplements, continuations, keys and indexes. In her Cataloging for small libraries. Stechert, 1926, p. 216–30.
Many cards are given to show methods of adding such continuations to the catalog cards.

——— Cataloging for branches. A.L.A. Bulletin 3:397–400. Papers and Proceedings, September, 1909.
Methods used at the Brooklyn Public Library.

MANN, MARGARET. Checking duplicate copies on the shelf-list card. Library Journal 37:142–43. March, 1912.
How to use the card described in this chapter.

——— The cataloging system at the Carnegie Library of Pittsburgh. Library Journal 38:23–24. January, 1913.

MOON, A. C. Principles of cataloging for branch libraries. A.L.A. Bulletin 16:259–61. Papers and Proceedings, July, 1922.
Describes methods used at the Carnegie Library of Pittsburgh and the St. Paul Public Library.

ROSHOLT, RUTH. A selective catalog. Plan for making the large catalog usable. A.L.A. Bulletin 16:257–59. Papers and Proceedings, July, 1922.
An abstract of a paper which gives some helpful suggestions about cataloging for branches.

Should all cataloging be done at the central library? (a discussion) Library Journal 23:c166–68, 1898.

THOUGHT QUESTIONS

1. What catalog and shelf-list records are necessary for taking care of the book collection of a branch library?
2. Give an example of a work of fiction showing necessity of distinguishing between two editions of the same title.
3. Do you consider it necessary that the catalog should show the exact holdings of the continuations in the library? Explain.
4. Why is it important to keep accurate statistics of withdrawn books? Explain.

Chapter XV

Library of Congress Cards

I. Centralized Cataloging Leading to L. C. Cards
   1. Definition of centralized cataloging
   2. Standardization
   3. Early attempts in centralized cataloging
II. Libraries Printing Catalog Cards
III. Facts About Library of Congress Cards
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IV. Use of Library of Congress Cards
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V. Use of L. C. Cards for Other Records
VI. Depository Catalogs

Students of library science should have some slight knowledge, at least, of the cooperative movements leading to the printing and distribution of catalog cards by the Library of Congress. This information is important not only as history, but also as a basis for future work along cooperative lines, since any new developments in which all libraries participate will begin at the point where an apparent culmination has been reached. Those who are to shape future policies and push forward the boundary lines of library work must profit by the experience of those who have carried the research up to a certain time.

I. Centralized Cataloging Leading to L. C. Cards

A study of centralized and cooperative cataloging belongs to the advanced student, hence the account given here must be very brief. It will be limited to a recital of those experiments which led directly to the cooperative methods now used by the Library of Congress.

Before outlining some of the experiments made, it may be wise to pause a moment and to consider the requisites for any cooperative cataloging scheme. With this background of facts one will have a better understanding of the difficulties which had to be surmounted before any progress could be made.

1. Definition of centralized cataloging. Cataloging so organized and executed as to be applicable and available to a number of libraries may be designated as centralized cataloging. Cooperative cataloging is sharing on the part of a number of libraries the labor of cataloging with the purpose that all libraries may thus utilize the combined labors of those contributing, thus avoiding the duplication of an operation common to all. Cooperative cataloging should be centralized; centralized cataloging is not necessarily cooperative. The success of centralized and cooperative cataloging depends on agreement among all or the great majority of libraries on methods of cataloging, and more particularly agreement in the choice of entry words and headings.

2. Standardization. To realize such a far reaching and almost Utopian project, certain methods and means had to be standardized. No cooperative plan for centralized cataloging could be entirely successful until the following requirements were met:

a. Uniform rules for entry. We have already observed that uniformity is fundamental to the usefulness of a catalog, and that unless the same code of rules is followed for the main entry, these entries will not file together in the catalog.

b. A centralized bureau. Just as every catalog department must have revisers to unify its work, so must there be a central bureau to unify the work of several independent offices working on a common catalog. There must be some body

responsible for the final work. In this body will also be vested the financial responsibility, the administration of the work, and the general oversight of the whole affair. Some means must be provided for securing the books to be cataloged, and for assembling an experienced staff of catalogers.

c. Uniform methods of printing. The cost of printing various *forms* of cards for one book was so high as to be entirely out of the question. Many experiments were tried before funds and means were available for carrying out the idea of duplicating one card and using it as a unit.

d. Means of distribution. The prompt delivery of catalog cards to the libraries taking part in any cooperative plan has proved a very baffling factor. Books cannot be held in the catalog room for long periods awaiting the receipt of cards. On the other hand, the central bureau is dependent on the publishers' furnishing them with copies for cataloging.

e. Uniformity in size of cards. Before the question of the interchange of cards was thought of, libraries paid little or no attention to the size of card used. Some used a small card, half the size of the card now taken as standard, others used cards much larger. It was not practical for libraries to subscribe to cards which would not fit into their catalog cases or file with the cards already in use, therefore it was soon apparent that all libraries must adopt a standard size.

f. Financial support. The expense of any cooperative movement is usually met by those who have a share in the undertaking, and a sufficient number of subscribers must be found to guarantee its financial success.

3. Early attempts in centralized cataloging. With these six points in mind, we are prepared to outline the principal attempts at cooperative cataloging, showing that many experiments were made before a satisfactory plan was evolved.

The bibliographical venture which has attained a high point of perfection at the Library of Congress is one which did not come suddenly. It is a story of patient, hopeful study made by farsighted bibliographers who labored year after year, passing on the results of their efforts to new workers in the field.

It was D. W. Cooley, one of the British Museum commissioners, who suggested (1850) the use of stereotype blocks for printing, but an American, as early as 1847, appears to have offered the same idea. Edward Edwards tells in his *Memoirs of libraries* how "the same idea had already occurred to Professor Jewett, now the distinguished Librarian of the City Library of Boston, who seems to have made it the subject of discussion with some of his friends and correspondents, both in England and America, without, however, having had any opportunity until 1849, of reducing it to practice."[1]

By this plan of Jewett's, which was printed by the Smithsonian Institution in its *Annual Report* for 1851, the titles were to be stereotyped separately and the blocks or plates preserved in alphabetical order, so that one could readily insert additional titles in their proper places. The formation of a general catalog of American libraries was the object. In 1852 an enlargement of this plan, with rules for cataloging, was printed by the Smithsonian Institution.[2]

Although this impetus was given by Jewett, little was attempted in this line in America between 1852 and 1876, when the first conference of librarians was held. At this conference T. H. Rogers presented a paper entitled "A cooperative index for public libraries,"[3] which was a plea for American librarians to save the labor and expense of compiling full catalogs for each library by cooperating in the preparation of an index to general literature.

By 1879 the first practical attempt to furnish catalog entries was under way. It was then that the *Library Journal* announced a supplement called the "Title-slip registry," to be sent with each monthly issue of the journal. After a few months this appeared under the title "Book registry," and reprinted the weekly lists from the *Publishers' Weekly*. The work lasted only one year because of lack of funds.

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[1] Edwards, Edward. Memoirs of libraries. Trübner, 1859, v. 2, p. 864–68.

[2] Jewett, C. C. On the construction of catalogues for libraries. Smithsonian Institution, 1852.

[3] Rogers, T. H. A cooperative index for public libraries. Library Journal 1: 62–63. November, 1876.

In 1882 appeared the third edition of Poole's *Index to periodical literature*. The first edition had appeared in 1848 and the second in 1863. This third edition was the outcome of the support given by the Library Association of the United Kingdom and the American Library Association to a plan by which fifty different libraries in Great Britain and the United States prepared all the index gratuitously. It is worthy of mention here as one of the first cooperative undertakings between libraries of Great Britain and our own country.

Melvil Dewey made the statement in 1877 that in his opinion a universal catalog was not practicable, and in 1885 he advocated[1] a smaller beginning with an annotated catalog. This plan as then outlined was substantially carried out in the publication of the *Catalog of the "A.L.A." library* in 1893, save that it was not annotated. The printing of successive volumes of the catalog covering the period from 1893 to 1926 proves the usefulness of this undertaking.

In 1893 two commercial firms entered the field of central cataloging: The Rudolph Indexer Co., and the Library Bureau. The plan of Rudolph Indexer Co.[2] was to furnish entries on cards for 100,000 volumes, beginning with the A.L.A. model library which was exhibited at the World's Fair in Chicago in 1893. The Library Bureau,[3] which was at this time furnishing supplies and printed matter to libraries, announced in 1893 that they were "prepared to supply public and private libraries, booksellers, and others interested with every appliance needed for the many applications of the *printed card* system." These cards were sold by yearly subscription rate per thousand cards. The books to be cataloged were obtained from the publishers. The Library Bureau continued to issue printed cards until 1896, when the work was transferred to the A.L.A. Publishing Board.

At this time (1896) the cards were extended to include analytical entries as well as entries for books. Warner's

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[1] Dewey, Melvil. The A.L.A. catalog. Library Journal 10:73–76. April, 1885.

[2] See Library Journal 18:450–51. October, 1893.

[3] See Library Journal 18:509–10. December, 1893.

Library of the world's best literature, Reed's *Modern eloquence,* the *English parliamentary papers,* 1896–1900, *Reports* of the Smithsonian Institution and the U. S. National Museum, and the *Old South Leaflets* were among the publications for which printed analytical cards became available. More than two hundred fifty periodicals and transactions of societies were cataloged by the cooperative efforts of the large libraries of the country.

The Publishing Board of the American Library Association carried the responsibility of printing the cards until the Library of Congress took over the work in 1901.

II. Libraries Printing Catalog Cards

By 1900 some individual libraries were issuing their own catalog cards. The Boston Public Library was printing as early as 1876, the Harvard University Library began to print its cards in 1888, the Carnegie Library of Pittsburgh in 1895, and the John Crerar Library not only printed cards for its own catalog, but also offered them for deposit and sale to other libraries. These libraries were followed by the New York Public Library, the University of Chicago, University of Michigan, and Queen's University Library.

Cards from all of these libraries are on deposit at the Library of Congress and many of them can be purchased from the libraries issuing them. Nearly all now limit their printing to titles not obtainable from the Library of Congress.

Catalog cards are now being printed by the Preussische Staatsbibliothek, Berlin (Universitätsschriften only), the Koninklijke Bibliothek, The Hague (Repertorium op de Nederlandsche periodieken), the Concilium Bibliographicum, Zurich, and The Chief Committee for Political Education of the RSFSR, Moscow.

III. Facts About Library of Congress Cards

The Library of Congress began printing its own catalog cards in 1898 and after two years offered these, with the endorsement of the American Library Association, to libraries, other institutions, and to individuals.

Libraries had long profited by books and pamphlets which had come from the Government Printing Office, and now the use of this office for printing catalog cards prepared by the Library of Congress brought to culmination the long and arduous efforts to make centralized cataloging a reality. A branch of the Government Printing Office is now installed in the Library of Congress building, where the cards are printed by the linotype process. All cards are shipped to libraries by government frank, and blanks are furnished so orders can be forwarded by libraries free of postage.

1. Scope of the stock. Since 1871 the Library of Congress has been the legal depository for copyrighted books, and while the stock of cards for these books will never be complete, it is full enough to furnish most of the entries needed by the majority of libraries. The library naturally has a large collection of noncopyrighted books in English in all classes; it is fairly full in history, political science, and the most important of the foreign languages and literatures; it is very full in bibliography, American history, and American politics; and fairly full in agriculture, education, and geology.

The stock of cards is constantly augmented by (1) copy for catalog cards received from other libraries of the government as their current accessions are cataloged; (2) by printing cards from copy supplied by certain libraries outside of the District of Columbia including (a) popular noncopyrighted books in English which the Library of Congress does not care to acquire, (b) highly specialized books along lines which the Library of Congress does not attempt to cover exhaustively, (c) publications now out of print which it is desired to have represented in the stock, (d) analytical entries for a large number of publications of learned societies not analyzed by the Library of Congress but by various university, reference, and large public libraries; (3) analytical entries for sets and series of publications in the Library of Congress, prepared by and printed for the Card Division.[1]

2. Some statistics. The Library of Congress has 1,061,474

[1] U. S. Library of Congress. Card Division. Handbook of card distribution. 1925. Part VIII, p. 84–85.

different titles now (1928) covered by the stock of cards kept for distribution to other libraries. The average number of copies of each card is estimated at seventy, making the total number of cards in stock about 74,301,180. When the stock of any card is exhausted, the card is reprinted.

The number of libraries, institutions, and individuals subscribing to cards has steadily increased from 200 in 1901 to 4,306 in 1928.

The returns to the United States Government for the sale of cards have increased from about $4,000 in the fiscal year 1901–1902 to $195,148.98 in the fiscal year ending June, 1928. The amount practically covers the cost of the cards, the cost of storage, and the salaries of the fifty odd assistants engaged in distributing them. Taking into account the great utility of the card distribution plant to other work of the Library of Congress, it can fairly be said that the service to outside libraries is self-supporting. The work seems now well established as an important item in American library economy.[1]

3. Use by individuals. The value of the L. C. printed cards to libraries has already been established, but they have a very real and practical use to other institutions and to individuals as well. A specialist in any line of work can, by applying to the card division of the Library of Congress, secure a card bibliography of his special subject. Such a bibliography would be limited to books and such analytical articles as had been included in the card stock, but often the entries would mount up to thousands of cards. A teacher of a special phase of library work put in an order for all cards covering the subjects classification, subject headings, alphabeting, and indexing, and received promptly from the Library of Congress over five hundred cards including many foreign titles which could not have been found in this country except at the Library of Congress. This was a quick way to get together a bibliography, the compilation of which might have taken months. Schools, clubs, publishers, museums, and booksellers could find many ways of making use of these cards.

[1] Figures are quoted from Report of the Librarian of Congress for year ending June 30, 1928.

4. Form of card. One form of card only is printed, called the unit card. Any number of entries may be used for the same book by ordering additional copies of this card and adding to the top of each the word or symbol under which the entry is to be filed. This use of a unit card was explained in Chapter VII. The Library of Congress does not supply cards already adapted, but it does print on the bottom of many cards the entries and subject headings needed to catalog the book fully for a dictionary catalog. These headings are suggestive only; others may be substituted or added.

5. Price of cards.[1] Like other public documents issued by the United States Government, the printed catalog cards are sold at a price fixed at cost of production plus ten per cent. No charge is made for the expert service of cataloging since this work must necessarily be done for the Library of Congress. The price of the cards varies chiefly according to the amount of labor required in selecting and shipping them. This labor, together with the cost of composition, determines the price of the first card, which is always higher than the duplicate cards for the same title. The price of the cards (1929) after the first is always the same (1½ cents), but the cost of the first varies, according to the methods used in ordering, from 2½ cents to 4½ cents. The average cost per book counting at least three cards per title, varies from 5½ to 7 cents at the present (1928) writing. The price of three cards ordered by number would be 2½ cents plus 1½ cents plus 1½ cents = 5½ cents; the price of three cards ordered by author and title on slips each containing all necessary information would be 4 cents plus 1½ cents plus 1½ cents = 7 cents.

6. Payment for cards. Libraries may pay for cards by making a deposit at the Library of Congress, but other institutions, individuals, and firms are required to pay for them in advance unless they are regular subscribers. Anyone contemplating the purchase of cards should secure the latest data on this subject from the Library of Congress.

[1] See U. S. Library of Congress, Handbook of card distribution, for latest figures.

7. Size and quality of cards. The L. C. cards are $7\frac{1}{2} \times 12\frac{1}{2}$ cm in size, or about $2^{61}/_{64} \times 4^{59}/_{64}$ inches. This is the standard size used in libraries and in business offices. The thickness of the stock used is about $1/100$ inch (about 25 mm). One hundred cards weigh a little less than eight ounces. The card stock used before 1905 was but fairly satisfactory; that used since that date has been of first quality.

IV. Use of Library of Congress Cards

1. Administrative questions. Before the local library can decide to use Library of Congress cards it must consider certain relations between its own policies and those of the Library of Congress regarding form of headings, card forms, number and kinds of reference books available.

The elements which will most influence the library in the acceptance or non-acceptance of the Library of Congress cards are not so much questions of bibliography as questions of administration. Therefore we shall assume that we can accept the cards as satisfactory from the cataloging point of view, and turn our attention to those problems which must be analyzed from the administrative side.

Library administrators are always interested in any new methods which will (1) reduce cost; (2) release professional workers from mechanical drudgery; and (3) give better service to those who come to their libraries. These ends can be attained only to that degree in which the assistants in a library share or participate in the improvement of methods, and in which they are willing to acquire the necessary skill to advance the excellence of service sought by the library.

If the search work formerly carried in catalog departments by professional assistants can be reduced by using the product from a central bureau where the quality is as good as the local library can secure, or even better, there is certain to be a gain to the library in both time and money. Again, if much of the sorting, duplicating, and handling of cards can be cared for by clerical assistants, the same advantages both to individuals and to the library are apparent. All this is just what printed cards can accomplish.

Labor turnover is certain to be less in a catalog department where printed cards are in use, since professional assistants are relieved of much of the routine. The clerical side of the work is reduced to such simple terms that it can be carried by assistants untrained in library science.

2. Questions of routine. With these general advantages in mind, we may now consider some of the questions involved in handling these cards and adapting them to the local catalog.

a. Handbook of card distribution. The card division of the Library of Congress has issued such explicit directions for using its printed catalog cards that any detailed outline here could be only a repetition of the pamphlet issued by the division, entitled *Handbook of card distribution, with references to bulletins 1–25.*[1] This should be used in connection with this chapter.

This chapter will, therefore, merely bring out certain bearings this routine has on the organization of the catalog department. The routine outlined will be divided into three operations:

1. Ordering cards
2. Checking the receipt of cards
3. Adapting cards to the local catalog

b. Ordering. The determining factors in ordering, from the librarian's standpoint, are: (1) the method already in use in the library for ordering books, (2) the kind of cataloging the library is doing, (3) the time element in holding books for cards, and (4) the cost element in connection with reordering if more cards are needed than were first ordered.

If the same record used for ordering books can be made to answer as an order for cards there is a saving of time not only in making a duplicate order but also in the time of the receipt of cards. Some libraries make a carbon copy of their book orders and forward this to the Library of Congress,

[1] U. S. Library of Congress. Card Division. Handbook of card distribution, with references to bulletins 1–25. 6th ed. Govt. Print. Off., 1925. This pamphlet is sent free to all libraries subscribing to Library of Congress printed cards, and is sold to others for 35 cents, by the Superintendent of Documents.

with the result that printed cards are on hand when the books reach the catalogers. Others, who prefer to order on slips, copy the order card.

Before deciding to use either of these methods the library must weigh the advantages and disadvantages of ordering cards before seeing the book. If the book has been sent to the library for approval the question is solved, but if there has been no opportunity to peruse the book and the library generally uses more cards than the Library of Congress indicates (more analytical entries, for example) it may not be economy to accept the regular number of cards designated by the Library of Congress. Those libraries preferring to examine the book so that they may order the exact number of cards needed must often either withhold the book from circulation or make a temporary card to answer until the printed cards come. They save any waste by not ordering too few or too many cards.

To some libraries the advantage of having the cards when the books arrive is of greater importance than the saving of a few cents on the extra ordering of cards. All things being equal, however, it is economy to make the first order cover all the cards needed for each title, since each additional order means that the library again pays extra for a *first* card.

Probably, after one has considered the advantages and disadvantages mentioned, the best method will be to have no fixed rule. Cards for some classes of books will be ordered before examining the titles while in other classes the cataloger will want to decide upon the number of cards after studying the books. Cards may be ordered in any of the following ways: (1) by author and title, (2) by card number, (3) from proof sheets, (4) by series, (5) by subject.

The card number is on the lower right corner of the L. C. card, for purposes of ordering. If cards are ordered by number, the numbers must be searched before the order can be sent. If a depository catalog is available, ordering by number is preferred.

Library of Congress order numbers can be obtained from the following: Depository catalogs, *Proofsheets* of L. C.

cards, *The Booklist, A.L.A. catalog, United States catalog* and supplements, *Cumulative book index, Book review digest, Catalogue of U. S. public documents, Monthly list of state publications, Catalogue of copyright entries* (*part 1, Books*), Library of Congress publications, *Books for high school libraries* (bulletin 41, U. S. Bureau of Education), *United States Daily,* and a few other special publications.

In ordering, each library must adopt the method or combination of methods best suited to its needs. The most common and probably the most satisfactory method for the beginner is to order by author and title, but another method may be found more effective and more economical, depending on the organization of the library and the ease in finding Library of Congress order numbers. Probably the most satisfactory way is to order by serial number and symbol whenever possible, and to use the author and title method in other cases.

c. Checking when received. Each package of cards received contains a statement of the number of cards included and cost of the same, also the original order and an annotation on the items which could not be filled. Cards must be checked and counted to see if orders and cards correspond. Unfilled orders for titles are placed in a separate file to await receipt of "held" cards, that is, orders which cannot be filled at once. Returned order cards may be used for temporary shelf cards if cards have been ordered by author and title, or if no other use can be made of them they are discarded. Cost slips are filed in the catalog department, or are sent to the library accountant. They must be saved and checked against the bill, which is received monthly, as a rule.

Any error in the shipment may be returned to the Library of Congress accompanied by the original order on which corrections are noted. A list of such returned orders is convenient as a follow-up record.

Printed *analytical cards* for series need special checking as received, because cards and serial publications are seldom received at the same time. It is therefore necessary to have a check for the receipt of both printed cards and serials. This can easily be combined with the serial check-list. Each check-

list card for which L. C. analytical cards have been ordered should be stamped "Analytical cards" to distinguish the serials for which cards are ordered and analyzed. A small "c" in red ink above or opposite each number of the continuation of the check-list record will show what cards are on hand for cataloging that special publication. If cards arrive before the number of the serial to be analyzed is received, pencil the number of the publication on the check-list and add the "c" to show cards are on file. By this means the part may be cataloged as soon as it is received. The check-list card should be revised frequently and missing cards should be sent for.

d. Preparing for the catalog. We shall proceed with the unit cards which match the book exactly, and shall not consider here those cards requiring changes to fit a different edition. Corrections on cards will be taken up in the next chapter.

(1) *Main card.* One card must always be singled out as the *main* card in any set of cards for an individual title.

If an official or a union catalog is maintained, one L. C. card may be used as the main card. To it is added the tracing of all other cards, if not already on the face of the card; also the location of various copies of the book, as branches, departmental libraries, seminar rooms, stations, or schools, if this is considered desirable. If another form of card is used for the official card (for example, a typewritten card or a process card), then this card becomes the main card and the L. C. printed card is treated as a secondary card.

If the library does not maintain an official catalog, as will be the case in many libraries, the L. C. printed card which is the author card in the public catalog becomes the *main* card. Tracings are checked on this, and it serves as the main card, although it is filed in the public catalog.

(2) *Author card.* The author card is used as printed, no additions being made to the card except the call number and any necessary tracings.

(3) *Subject cards.* All subjects and other added entries used by the Library of Congress are traced on the bottom of each card. These headings, or tracings, have two sets of num-

bering; subject headings are given consecutive Arabic figures, while all secondary, or added, entries are given Roman numerals. For example:

1. English language 2. Psychology I. O'Shea, Michael Vincent, 1866– II. Title

If the local library adopts the same headings, these are checked on the main card. If an additional or different heading is chosen, it must be traced on the back of the main card and the discarded heading can be crossed off. After subject headings have been chosen, each is added to the top of one of the unit cards—this word or subject then becomes the filing medium. Some libraries use red for all subject headings in order to distinguish subject entries from all others; other libraries, including the Library of Congress, have discarded the red and are using black because it is more legible and durable. These are typed in capitals. If the library is already using black subject headings and wishes to change to red, these black headings can be underscored in red. Some libraries use cards with red edges for all subject cards.

e. Cards for analytics. Almost any L. C. unit card can be adapted for an analytical entry. Those listing contents are the most convenient to use, but if contents is not printed on the card, designation of the part to be analyzed may be added as a note. Author, title, and subject analytics can be shown.

(1) *Analytics as separate unit cards.* (See model card on page 291.) When the analytical entry has its own imprint and distinctive title-page and pagination, it constitutes a separate entity, and the analytical is printed as a separate unit card. This card takes the call number of the main work, and, if the main work is in more than one volume, the volume number must be added to the call number so that the analytical entry can be located in the correct volume or number. This analytical unit card is treated as any other unit card: Subjects and added entries are traced from it, and it is considered the *main* analytical card; it is adapted in the usual way by writing added entries at the top of duplicate cards. These separate analytical

cards may be ordered for certain publications regularly analyzed by the Library of Congress.[1]

(2) *Serial analytical cards.* The library having complete files of serial publications will want to order complete sets of analytical unit cards, but the smaller libraries, having only odd numbers of publications within a series of monographic publications, may order the cards for a single title and use them, not as analytical entries but as main entries. In this case the book or pamphlet is classified separately and the *call number of the individual book* is added to the card, not the call number of the series as was the case when the complete series was cataloged.

This may bear repeating in connection with this model card.

Clark, Jacob Allen, 1888–

... The common white wheats. [By J. Allen Clark, John H. Martin and C. E. Leighty] [Washington, Govt. print. off., 1922]

42 p. illus., maps. 23cm. (U. S. Dept. of agriculture. Farmers' bulletin 1301)

Contribution from the Bureau of plant industry.

1. Wheat—[Varieties] I. Leighty, Clyde Evert, 1882– joint author. II. Martin, John Holmes, 1893– joint author. III. Title.

Agr 23-266

Library, U. S. Dept. of Agriculture 1Ag84F no. 1301

[6]

This card can be used in either of two ways: (a) As a card for Clark's *The common white wheats.* In this case it is assumed that the library does not have a complete file of the Farmers' bulletins, but buys certain numbers and classifies them as individual books. The call number on this card would then be the number for *The common white wheats.* Use U. S. Dept. of Agriculture, Farmers' bulletin, as a series added entry. (b) As an analytical card for *Farmers' bulletin 1301.*

[1] See Bulletins 16–19 mentioned on page 292.

In this case it is assumed that the library has a complete file of the *Farmers' bulletin,* that they are classified as a set, all having the same call number. This card then takes the call number of the set plus the number of the bulletin which is 1301. The card is traced from the main card for the Farmers' bulletins.

The following *Bulletins issued by the Library of Congress* give lists of series for which separate analytical cards may be obtained:

Bulletin 13 (5th ed. July 1, 1924) Cards for government documents.

[1] Bulletin 14 (7th ed. July 1, 1924) Cards for publication of the U. S. Department of Agriculture.

Bulletin 15 (6th ed. July 1, 1924) Cards for publications of Geological Surveys and Bureaus of Mines [American and foreign publications].

Bulletins 16-19 (4th ed.) Series of publications for which cards are in stock. Now (1929) out of print. These include:

16. Orders by series for cards for books and monographs in series.
17. Series of publications in English (excluding those for American history).
18. Series of publications in American history.
19. Series of publications in foreign languages.

[1] Bulletin 21 (5th ed. July 1, 1924) Cards for publications of the U. S. Bureau of Education; cards for the literature of education.

[1] Bulletin 23 (4th ed. July 1, 1924) Cards for publications of the Smithsonian Institution and the U. S. National Museum.

Bulletin 25. Cards for publications of the League of Nations and their arrangement in a special catalogue at the Library of Congress. 1928.

f. Series cards. The Library of Congress does not print combined series cards for books belonging to a publisher's series, but like most libraries continues to use the common

[1] Cards for full sets of the current publications of the U. S. Dept. of Agriculture can be supplied with the headings already put on for secondary entries. Cards for *Farmers' bulletins* and *Yearbooks* of the Dept. of Agriculture, the *Bulletins* and *Annual reports* of the Bureau of Education and the *Annual reports* of the Smithsonian Institution are supplied at a special rate as are also sets of cards for publications of the U. S. Dept. of Agriculture.

form of manuscript card. On this card the series is the important entry. Author, title, date, and call number of each book in the series are entered on this card.

Childhood and youth series.

372.4 Cook, W. A. The child and his spelling. [©1914]
C77

174.7 Healy, William. Honesty. [©1915]
H43

370.15 Swift, E. J. Learning and doing. [©1914]
S97

Some libraries show what books they have in a series by ordering an extra card for each book and adding to the top the name of the series. These cards are then filed first by the series and second by the author of the book in the series.

Childhood and youth series.
Swift, Edgar James.
Learning and doing, by Edgar James Swift...
Indianapolis, The Bobbs-Merrill company [©1914]

9 p. l., 249 p. diagrs. 19½ cm. (Childhood and youth series, ed. by M. V. O'Shea)
"References for further reading": p. 229-238.

1. Educational psychology. 2. Teaching. I.Title
14-12490

Library of Congress LB1051.S9
Copyright A 376656

This takes the place of the combination manuscript series card just mentioned. Cards of this kind take up more space than the combination cards, but again, the reader has full information concerning each book before him. Some of the best authorities do not recommend these for large libraries.

The "contents book" can be used in lieu of a series card in many cases.

g. Authority cards for societies. An authority card is made at the Library of Congress for main entries established when cataloging serial publications of societies and institutions. This contains, whenever obtainable, the date of founding, date of incorporation, changes of name, and affiliation or union with other societies. These cards, if of sufficient importance, are printed by the Library of Congress; e.g.,

> Royal society of Edinburgh.
> Founded and incorporated by royal charter 1783; its immediate precursor was the Philosophical society of Edinburgh, founded 1739.

h. Reference cards. Reference cards, while printed by the Library of Congress, are difficult to order unless a Library of Congress depository catalog is within reach. Such cards are not traced on any printed card because they do not belong to any specific book, nor are they sent when a full set of cards is ordered for a special book. Because of this difficulty of ordering, libraries usually make their own reference cards.

V. Use of L. C. Cards for Other Records

1. Shelf-list. The printed card can be used as a shelf-list card for the main library and branches by adding the call number to the card and filing by this number. Copy numbers can be added to the card and any other items which the library finds necessary. Should there be no space on the card for such additions, a blank card can be tied to the L. C. card. By using the printed card with the full entry, the shelf-list becomes a very usable and valuable classified catalog. In libraries where a separate dictionary catalog is made for each special department, a duplicate set of the shelf-list cards of books in that department is made possible through the use of

the L. C. cards. The departments then have dictionary and classified catalogs.

2. Use of cards for other purposes.

a. Foreign language lists. Use one card for each title printed in a certain language, as French, Spanish, Italian, and alphabet by author under broad classes, as Science, Religion, History.

b. Special collections. Use one card to show what authors, or subjects, or both are represented in a special collection.

c. Card lists supplementary to printed lists. If the library has printed a catalog or special bibliography, and wishes to keep up a supplementary card list so that a new edition can be printed later, use L. C. cards for the supplement. The copy will then be at hand when it is possible to print.

d. Special bibliographies. Author or subject bibliographies are easily kept up by means of L. C. cards. If cards are arranged by the L. C. class number printed on the bottom of the card, one has, without added effort, a subject bibliography as far as L. C. cards are available. Naturally such lists must be supplemented by manuscript cards when no L. C. cards can be obtained.

e. Current serial publications. A check-list of serial publications can be made up, at least in part, of L. C. cards; such a list is very useful since the cards contain full notes.

f. List of subject headings. A list of subject headings used in a dictionary catalog could be compiled in large part by using one card for each new heading as it comes into use. Such a list would have the added value of having at least one illustration of the use of the heading for a specific book.

g. Other separate files.

(1) A separate list of fiction
(2) Biography list, arranged by the biographee
(3) List of rare books, arranged by date or printer, or place
(4) List of local material
(5) Lists of books for schools, stations, hospitals, or other agencies
(6) Lists of juvenile books
(7) Lists of books in the open shelf room
(8) Lists of books in departmental libraries

VI. Depository Catalogs

Complete author sets of printed catalog cards are issued by the Library of Congress and are being deposited in certain of the larger libraries for the following purposes: 1. To enable investigators to ascertain whether a given work is in the Library of Congress. 2. To promote bibliographical work. 3. To enable the depository library and other libraries in its vicinity to order cards by number. These depository catalogs are author catalogs only. Certain conditions are exacted of the libraries in which the sets are deposited. One of these is that the cards shall be kept alphabetically arranged and made accessible to the public.

There is no disputing the fact that depository catalogs are very valuable bibliographies and a great asset to the cataloger in the large library. They furnish an invaluable tool in which to find full names, identify editions and get L. C. card numbers for ordering the printed catalog cards.

Some libraries have made these depository catalogs very useful by adding cross-references from one form of author's name to another. One library makes the following statement:

> "It is not an impossible task to cross-reference the depository catalogs and it adds immeasurably to their value. Without references, in order to find the L. C. card it is often necessary to find elsewhere the author of an anonymous book or look up all the variant forms of author's name—often impossible in the case of Slavic and oriental names. When the (library) acquired its depository catalog, 100,000 cards came, arranged by serial number. In sorting them, all cards with bracketed authors and all cards in which author's name was not same form as on title-page were thrown out and references made. Every pack received since then has been looked through for anonyms and variant forms of names. We make from 800 to 1000 references every year. They are made by a typist, largely on backs of waste cards. As a result we spend very little time searching for bibliographical information for ourselves or for the public, and we have a small staff. Those references save us an

incalculable amount of trying work, and the purchase of many expensive reference tools."

In accepting approximately 1,200,000 cards which now (1929) make up this depository set, the library must realize the work involved in keeping it up. Current cards (about 48,000 yearly) are sent out twice a week. These cards are arranged alphabetically, ready for filing, but getting them into the catalog is no small task. Too often this added task is imposed on the catalog department by the chief executive who does not realize that the staff is inadequate to meet the conditions required.

The responsibility for filing into the depository catalog may be divided among several assistants by assigning a section of the alphabet to each.

References

BIBLIOGRAPHIES

Cannons, H. G. T. Bibliography of library economy. A.L.A., 1927, p. 473–76 (Section P 64).

Jahr, Torstein and Strohm, A. J. Bibliography of cooperative cataloging and the printing of catalog cards (1850–1902). Govt. Print. Off., 1903. Reprinted from the Report of the Librarian of Congress of June 30, 1902.
An exhaustive bibliography.

REFERENCES

Akers, S. G. Cataloging problems in small libraries. Public Libraries 27:470–72. October, 1922.
Recommends the use of Library of Congress cards for nonfiction wherever the library can afford them.

——— Library of Congress printed catalog cards. How to order and how to use them. In her Simple library cataloging. A.L.A., 1927, p. 74–78.

American Library Association. Depository catalogs [of L. C. cards]. In its Survey of libraries in the U. S. A.L.A., 1927, v. 4, p. 70–80.

——— Committee on Cooperative Cataloging. Report, 1928. A.L.A. Bulletin 23:397–98. Papers and Proceedings, September, 1928.

Andrews, C. W. Printed card-catalogues. In International Library Conference, London, 1897, Transactions and Proceedings, p. 126–28.
The advantages of printed over manuscript cards and the methods in America (1897) for printing cards, with some attempt to show costs.

Bishop, W. W. Printed catalog cards. In his Practical handbook of modern library cataloging. 2d ed. Williams, 1924 (1927), p. 66–81.
How to order and use Library of Congress cards.

Blease, William. Co-operative cataloguing. Library Journal 40: 708–13. October, 1915. Reprinted from Library Association Record, v. 16, December, 1914.
Covers in greater fulness the same ground as does this chapter and in addition goes into the future of cooperative cataloging in England.

Clapp, C. B. Handling Library of Congress card orders in the average library. Library Journal 41: 463–68. July, 1916.
A full account of the routine used at the Dartmouth College library. Covers ordering, receiving, distribution, and preparation of the cards for the catalog.

Crawford, Esther. Some essentials of co-operative cataloging. Public Libraries 13: 201–06. June, 1908.
Draws an excellent parallel between the functions of the public and reference libraries. Suggests that the Library of Congress print and issue catalog cards adapted to the public library.

Field, H. H. The concilium bibliographicum in Zurich, Switzerland. Library Journal 28: 661–63. September, 1903.
A description of the work written for American librarians by the Director. Includes a cut of card used.

Foote, F. R. Cataloging for small libraries. A.L.A. Bulletin 5: 220–24. Papers and Proceedings, July, 1911.
Contains many suggestions covering the use of Library of Congress cards and gives hints on what to avoid when using them.

Jewett, C. C. On the construction of catalogues of libraries and a general catalogue. . . . With rules and examples. Smithsonian Institution, 1852. Also printed in the 5th report of the Regents of the Smithsonian Institution.

MacGeorge, A. E. Statistics about Library of Congress cards. Wisconsin Library Bulletin 24: 209–10. July, 1928.

Putnam, Herbert. Distribution of printed catalog cards by the National Library. In Sawyer, H. P. ed. The library and its contents. Wilson, 1925, p. 339–48.
A comprehensive account of the plan written one year after the library began to distribute cards.

Saving through use of Library of Congress cards. Library Journal 49: 287. March 15, 1924.
An editorial.

Smith, E. A. Cooperative cataloging. Libraries 32: 270–72. June, 1927.
Suggestions for the duplication of cards made at local libraries, especially those in little known foreign languages.

Symposium on printed catalog cards contributed by various libraries. Library Journal 36: 543–56. November, 1911.

An excellent account of catalog cards printed by Library of Congress, Harvard, New York Public Library, John Crerar, Boston Public Library, and the Carnegie Library of Pittsburgh.

TAYLOR, L. E. Cataloguing of foreign books; report of a round table meeting of the Mass. Library Club. Library Journal 52:237–39. March 1, 1927.

U. S. LIBRARY OF CONGRESS. Card Division Bulletin. No. 1– July 1, 1902–date. Govt. Print. Off., 1902–date.
Valuable. Some are out of print.

——— Handbook of card distribution, with references to Bulletins 1–25. 6th ed. Govt. Print. Off., 1925.
Should be read carefully.

——— L. C. printed cards, how to order and use them, by C. H. Hastings. 5th ed. Govt. Print. Off., 1925.
An abridgment of the Handbook; it does not take its place, however.

WARREN, H. B. The use of L. C. cards in small libraries. Library Journal 53:662–63. August, 1928.
Debates the question of the use of the cards and also by whom the cataloging should be done.

WRIGHT, R. Cooperative cataloguing. Library World 25:417–21, 1922–23, and 26:10–16, 1923–24.
A plea for cooperative cataloging to help small libraries in England. Gives suggestions for carrying out such a plan.

THOUGHT QUESTIONS

1. Explain just how the Library of Congress meets the requirements for centralized and cooperative cataloging mentioned in this chapter.
2. What use could publishers make of Library of Congress printed cards?
3. Give some advantages of centralized cataloging.
4. Suggest some new phase of centralized cataloging which might prove helpful to libraries.
5. What, in your estimation, are the three best points about Library of Congress cards?
6. Suggest what you would consider the best method of ordering cards for branches, if branch books were received after the copy for the central library had been cataloged.
7. Do you think Library of Congress cards could be prepared for the catalog by a person untrained in cataloging? Explain.
8. Explain the use of the L. C. unit card in making analytical entries.

Chapter XVI

Adapting Library of Congress Cards to Local Use. Local Unit Cards. Duplicating Processes

I. Changes on Library of Congress Cards
   1. Author changes
   2. Title changes
   3. Edition changes
   4. Imprint changes
   5. Collation changes
   6. Notes
   7. Changes in tracing of subject headings

II. The Local Unit Card
   1. Specifications
   2. An abbreviated card

III. Duplicating Processes
   1. Duplicating machines
   2. Typed unit cards
   3. Multigraphed unit cards
   4. Addressograph
   5. Photostat

I. Changes on Library of Congress Cards

Changes to be made on the Library of Congress cards are those necessary to adapt them to local needs when they do not exactly fit the books, or to adjust them to conform to practice followed in the local library. If certain popular books in a public library are of little importance, that is, may be replaced frequently by other editions, it is rather unimportant to change all the bibliographical details on the printed card to correspond to the edition of the book under consideration. The card can be used as printed even though every item may not be correct. On the other hand, where changes in edition are important, as in books of science, a correction of the card in all details is necessary or the reader will get the wrong description of the book. Judgment must be exercised in making changes and a very careful comparison must always be made

between books and cards. It is better to make too many corrections than to err on the side of making too few. If the variance between book and cards is so marked as to require a different entry, or the re-arrangement of the items on the card, the printed cards should be discarded and new ones typed.

Additions should always be made on the typewriter; ink will spread and become blurred if the glazed surface of the paper has been removed. Corrections should be added in a note rather than by writing between the lines of print. Clearness should not be sacrificed for order of items.

1. Author changes. Consideration must be given to the relative value of the Library of Congress author entries as against those already in use in the local library. If the particular library has many cards under a form of name different from that used by the Library of Congress, it is sensible to change the entry on the printed card to the form already in use. All things being equal, it is best to accept the Library of Congress form; if it is not accepted, the question of correction must be met each time that entry comes up for cataloging, a point which must be considered when contemplating the change.

Changes in name are not so numerous if libraries are not using L. C. cards for fiction, since it is in this class of books that pseudonymous entries are most frequent, and a popular entry is most desirable. If the local library has not used the author's name with the same fulness as the Library of Congress, the cards can be used by bracketing that part of the name not used or by drawing a line through it. If a different main entry is used, write this above the name as printed, drawing a line through the discarded name, or, erase it and type in new entry.

Changes in corporate bodies, societies, and governments, as authors, should conform to Library of Congress practice unless a mass of cards is already in the catalog under a different form. Such entries are difficult for the cataloger to choose and the Library of Congress has every facility for making them correct. Entries for government documents may present

some problems because rules for the cataloging of these have gone through many changes. The Library of Congress has adopted the direct entry without inversion. If the local library has used the inverted form of the name, as *U. S. Education, Bureau of,* it is possible to file the Library of Congress non-inverted entries with these without changing the printed card. Underscore the significant secondary word and file by that rather than by the first word of the subdivision, as:

U. S. Census, Bureau of the
U. S. Bureau of the Census
U. S. Documents, Superintendent of
U. S. Superintendent of documents
U. S. Education, Bureau of
U. S. Bureau of education

If the headings do not lend themselves to underscoring, the entry must be changed.

2. Title changes. Changes in title can be indicated if the correction is slight, but it is often better to type new cards than to risk a misunderstanding.

3. Edition changes. As the library ordering the cards frequently designates on its "subscriber's card" just what variations in edition will be accepted, it is prepared to make certain changes, or to use cards which may vary slightly. If the edition is indicated on the card in figures it is easily changed or, if it is omitted, it can be added in a note. The date and number of pages as well as the edition must be scrutinized and in fact the whole L.C. card must be proof read with the volume in order that any variation in edition may be corrected.

4. Imprint changes. The mass of circulating books which come and go in a popular library need not be cataloged in great detail; therefore it is not always necessary to check details of imprint on the L. C. cards. If the L. C. card gives a publisher and place different from those in the book, the reader will, nine times out of ten, never be inconvenienced by the variation.

The university and reference library will, of course, make changes, because they will need an exact transcript of the title-

page of the edition cataloged. In case of books published simultaneously in England and America, the card needs no change, because the Library of Congress usually gives both imprints. It is convenient for the user of the catalog to know that an English book can be secured in America; therefore, when the English copy only has been cataloged by the Library of Congress, it may be useful for some libraries to add the American imprint to the card. For example, H. W. Wilson Company adds its imprint to English books published by Grafton. Library of Congress cards may note Grafton only, but the cataloger can add H. W. Wilson Company, New York, if desired. Date of publication should always correspond to the book being cataloged, except for fiction, where it is unimportant since the text of works of fiction is rarely changed.

5. Collation changes. The changes in collation must be indicated where full and complete cataloging is the rule of the library, but the small libraries and even many of the large public libraries make no changes except in the number of volumes. This number must always correspond to the books being cataloged. The series note should be changed when it is different from the one on the book.

6. Notes. It is always possible to add notes to L. C. cards. If there is no space on the card, a second blank card can be used. Notes on chapters, or full contents to be analyzed, valuable supplementary matter needed for a special purpose, and bibliographies are frequently useful in a library not so large as the Library of Congress, and should be noted on the cards.

7. Changes in tracing of subject headings. If the local library adopts a form of subject heading differing from that printed on the L. C. card, the changed heading may be traced on the back of the card and a line drawn through the tracing on the face of the card. Tracings of subjects need to be noted only on the official or main card, not on added entry cards.

II. The Local Unit Card

While catalog cards for the majority of titles can be purchased from the Library of Congress, there will always be

some cataloging for the local library to do. We have already recommended the typing of most fiction cards and those for some of the juvenile books when cards are not to be duplicated for outside agencies. These titles and others for which the Library of Congress cannot furnish printed cards must be cataloged as economically as possible.

Since the Library of Congress has set the standards for cataloging and is supplying cards for the greater part of our books, it is natural that the cataloging in the local library should conform in essentials to its practice. The cards made by the local library to supplement L. C. cards, which we shall call, for want of a better term, *Local unit cards,* should conform in size and thickness with the L. C. stock, and the same style and form of main entry should be adopted whenever feasible. It has already been demonstrated that the unit card is the most economical and most satisfactory form to use, and there is no reason why it cannot be made in the local library and serve the same purpose as does the card printed by the Library of Congress.

Local unit cards can be just as full or as brief as is deemed necessary. By analyzing the needs and eliminating all nonessentials, the local library can simplify the card considerably. Those libraries printing their own cards and supplying copies to other institutions will naturally want to print a catalog card as full as the L. C. card, and uniform with it in every particular, but other libraries can perfectly well have a simplified local unit card. The average local library cannot afford to spend the same amount of time on bibliographical search as is given by catalogers at the national library, nor is such meticulous work necessary. It is entirely practical to use catalog cards which are full and bibliographically minute when the information has been ferreted out at a central bureau where every tool is available; but to proceed similarly in the local library where the staff is small and the usual demands are for information less detailed, is to add unnecessary cost to cataloging and useless details to the catalog cards. Uniformity in headings must be maintained throughout the catalog, but uniformity in bibliographical details may vary when good

judgment dictates that such precision is not necessary to the successful finding of facts.

Each library will probably have a different opinion as to the importance of imprint and collation, but surely the day is near at hand when uniformity even in these items will be possible on the local unit cards. When this harmony comes another step in cooperation will be realized. Then there may be exchange between libraries of cards for books in foreign languages and other types of cataloging not now furnished by the Library of Congress.

1. Specifications. The following specifications have been drawn up to cover the main points in cataloging books in the average public library where there is no great demand for exhaustive reference work. The outline will furnish a working basis for the student and will insure uniformity in class work. We will also see how cards can be simplified.

In making these suggestions there is no thought of dictating policies for any library, or group of libraries; one form of card is suggested to insure uniformity in class work. Students will of course realize that when they take up actual work in a library, they may find a card in use which is very different in fulness and even in form from the one suggested here, and that they must accept the form that library is using.

It is probably more profitable to study this simple unit card form of cataloging after, rather than before, the student has actually cataloged books by using Library of Congress cards.

The changes from the L. C. cards here recommended are based upon those outlined by the Ohio Library Commission in 1904,[1] but additional details are enumerated. (See card page 307.)

(1) *Rules for entry.* Follow A.L.A. rules and L. C. supplementary rules.

(2) *Author fulness.* Use full name when easily found, but omit dates after the author's name except to distinguish two persons of the same name, or to conform to entries already in the catalog.

[1] Proposed changes in printed catalog cards. Public Libraries 9:321–22. July, 1904.

(3) *Title.*

(a) Do not repeat the author's name in the title except where the main entry for surname differs from the title-page name.

(b) Use the title with sufficient fulness to express the subject and intent of the author, but shorten when possible. Show omissions by three dots.

(c) Give edition, if it is indicated.

(4) *Imprint.* Use but one place (abbreviated), publisher (abbreviated), and date of publication, preferably the American imprint.

(5) *Collation.*

(a) Omit paging.

(b) Give volumes if more than one; or two or more bound in one or more, as 2 in 1; 3 in 6.

(c) Specify maps in history and travel books.

(d) Specify portraits in biographies.

(e) Use *illus.* for all kinds of illustrations except as specified in (c) and (d).

(f) Give series note for important series.

(6) *Contents and notes.* Contents is important on unit cards. Add it for short stories, plays, essays, addresses, etc., and for other books when it can be definitely expressed and is useful. Add notes of bibliographies, and other information when necessary.

(7) *Tracing.* Add all tracing to the back of the main card.

(8) *Abbreviations.* Follow list given in A.L.A. rules.

(9) *Capitalization.* Follow A.L.A. rules.

(10) *Punctuation.* Follow A.L.A. rules.

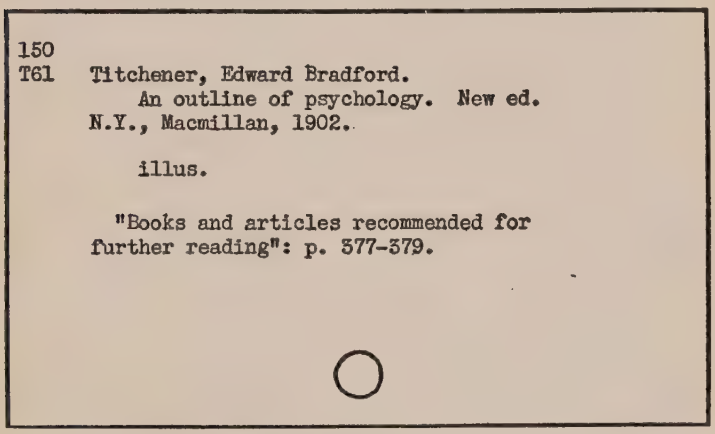
(11) *Form of the card.* Follow Library of Congress practice in form of the card, spacing, and in the order of entries.

(12) *Call number.* Add the call number in the same relative location as on the Library of Congress card, that is, in the upper left corner of the card.

The duplicating of these cards is a mechanical process. Some high school libraries cooperate with the commercial department where catalog cards are typed as a problem connected with that department.

2. An abbreviated card. When each card is typed, rather than multigraphed or duplicated by some other mechanical means, the full form need not be used for added entry cards.

After the main card is made, directions can be given to the typist to copy only certain parts of this for added entry cards. For example:—For title card: Write title on the top of the card and volume number if more than one, and then copy author only. For translator card: Write translator on the top of the card and copy author, title, volumes if more than one, and date only. Add call number, if used, to all cards.


150
T61 Titchener, Edward Bradford.
An outline of psychology. New ed.
N.Y., Macmillan, 1902.

illus.

"Books and articles recommended for further reading": p. 577-579.

Model of a Local Unit card.

Those libraries using various forms of cards in their catalogs can at any time introduce the unit card form if they think it is desirable. No difficulties will arise if the two forms are filed in the same catalog. One should study Fellows' *Rules* if he wishes to become familiar with various forms of cards.

III. Duplicating Processes

After copy has been prepared by the cataloger for a local unit card, this must be duplicated as many times as is necessary to make a complete set of catalog cards for one or more catalogs. These cards are then used exactly as L. C. printed cards are used.

The manifolding or duplicating of the card may be accomplished by various methods. The processes described here are the most common in use in American libraries, but students should be on the alert to see what new and better processes can be evolved from time to time to help in solving this important question. Mr. Martel, chief of the catalog department of the Library of Congress, writing in 1926, emphasizes this need when he says:

> "The most wanted labor-saving device in the business of making catalogs has not yet been found—it is a relatively cheap process of photographic or other faithful reproduction of the printed catalog card—typographical printing is unreliable and comparatively expensive. When we have that process, one of our most serious problems will have been solved."[1]

1. Duplicating machines. There are three general classes of duplicating machines: (a) Those making impressions from type through an inked ribbon; (b) Those making impressions by means of stencils; (c) Those using gelatin or off-set process.

The *multigraph* is an example of (a) and is probably the best machine now on the market for duplicating catalog cards. It is described farther on in this chapter.

Stencil or *mimeograph duplicators* produce impressions very similar to facsimile typewriting. A great many machines of this type are to be had, and any one may prove useful in certain cases. The device can be purchased for from $50.00 to $150.00.

The mimeograph machines are probably less satisfactory than the more simple gelatin or composition process duplicators commonly known as *hectographs*. These utilize the natural humid property of gelatin to transfer to the copying surface the matter to be reproduced, from which offset facsimiles are made by impression. The original copy may be made with a special duplicating typewriter ribbon or duplicating ink. Not more than twenty or thirty copies should be

[1] Martel, Charles. Cataloging, 1876–1926. Library Journal 51:1069. December 1, 1926.

counted upon, though more than thirty are possible with proper materials and careful manipulation. This is probably the most inexpensive mechanical device for duplicating, the cost ranging from $7.00 to $150.00, and should be tried out by those libraries not able to buy the multigraph.

As the typewritten cards and the multigraphed cards will be described comparatively, the typed cards will be introduced next.

2. Typed unit cards. Stiff catalog cards cannot be manifolded on the typewriter. The cards must be typed one at a time, but an expert operator can turn off the cards in half or less than half the time that it would take the slow-typing cataloger to do the same amount. One library trained a typist in two weeks' time to carry the unit card work independently. It therefore pays to have this mechanical work done by assistants less expensive than professional catalogers, especially if the library is keeping up several catalogs. Typed cards are more expensive to produce and less satisfactory than those made on a mechanical duplicating device like the multigraph, because each card must be proof read after it is typed; there is, of course, greater chance of error.

It is not within the province of this book to recommend any special make of typewriter, but a good machine should be chosen, equipped with a card attachment and a keyboard supplied with accent marks and special characters needed in making catalog cards.

The Hammond machine is especially adapted to typing cards in foreign languages because of its interchangeable type shuttles. Over three hundred and sixty type arrangements in a variety of styles, in all languages, all interchangeable, are available. This machine is excellent for making foreign language cards where type other than Roman must be used. Some very satisfactory cards have been duplicated on the *mimeograph* by using this typewriter to make the stencil, and experience in the reproducing of cards on the *hectograph* has proved fairly successful when Russian and Yiddish titles were duplicated after the special hectograph ribbon had been used on the machine.

The following table is the result of a test made to discover the *cost of typing catalog cards.* The card was one of average fulness, not so full as the Library of Congress card, but more detailed than a card would be for the average circulating library.

Cost of Typing Unit Cards

Time in 1 hr. periods	Number of cards English	Foreign language	Total No.
10-11 a. m.	40	8	48
3- 4 p. m.	43	8	51
10-11 a. m.	38	17	55
10-11 a. m.	29	14	43
10-11 a. m.	28	6	34
10-11 a. m.	0	35	35
6 hrs.	178	88	266

Average cards per hour ..... 44 cards
" " " day (7 hrs.) ..... 308 "
" " " week ..... 1694 "
" " " month ..... 6776 "

Taking off one day's work, or 308 cards, to relieve fatigue and to allow for rest, leaves an average of 6,468 cards per month. A salary of $125.00 per month for a typist makes the cost per card about 2 cents. Average 4 cards to a title makes the cost of cards per title 8 cents. This does not include proof reading after cards are typed.

3. Multigraphed unit cards. The multigraph is a rather small, compact machine similar in its functions to a printing press.[1] The cost of the multigraph varies from $100.00 to $250.00 according to the model selected. There are certain attachments and some auxiliary equipment which would add from $50.00 to $150.00 to the first cost.

A special operator is needed for this machine, but its manipulation is not difficult and the operator's time can be used on other work when not busy. It is especially satisfactory for card work, and the card may be either a real printer's printing with printer's ink or it may be duplicated by means of the inked ribbon, in which case it has the appearance of a typewritten card. An operator may acquire a speed of a line a minute in

[1] American digest of business machines, comp. by J. H. McCarthy. American Exchange Service. Chicago, 1924, p. 250.

composition, while distribution of the type is even faster. The composition for a five or six line catalog card, therefore, averages about five minutes. Naturally, difficult titles in foreign languages will take longer. Electrotype plates may also be used on this machine. These plates are very convenient for printing forms constantly used in the catalog department. They must be made, of course, outside of the library.

Many libraries, having branch or departmental catalogs to maintain, use the multigraph for duplicating when from five to eight or more copies of the same card are required. The five to eight card limit gives a safe margin for which the multigraph would cost less than typing. It has been found that an ordinarily full card can be set up, run, revised, and thrown down in the same time that three copies can be typed and revised. The gain comes in the revision, because after the first proof of a multigraphed card is revised, there can be no error in any of the duplicated cards. The advantages in multigraph work are in quantity production. The fact that the machine can be used for printing library form letters, circulars, form cards, and book-lists does not limit its cost to the catalog department budget. Its first cost can be distributed among several departments.

Call numbers and subject headings can be printed on Library of Congress cards by multigraph. Red ink may be used for these if necessary. Some libraries also print titles and call numbers on book cards and book-pockets with the same type used for printing the entry on the catalog card.

The following *routine* as followed in one library will serve to show how the machine is applied:

I. Multigraphing in full.

1. Copy is typed on reverse of spoiled stock and number of cards wanted is indicated. Multigraph copy is not used as an official card. It is apt to be soiled by the multigrapher, and it costs next to nothing to run one more card for this purpose.
2. If subjects and other headings are to be multigraphed, an attached form, filled out with all information needed by the multigrapher, is clipped to the copy.
3. Full entry is set up.
4. First card is proof read.

5. All cards are run.
6. Subjects and other headings are added one at a time.
7. Type for headings is shifted and held for tracing.
8. Type is rearranged and tracings are run.
9. One extra catalog card is run and held as copy in case more cards should be needed at a later date. This is better than saving the original copy because it is possible to set up more quickly from a multigraphed copy already spaced than from a typed copy. The extra card is run only for titles where future duplication is probable.

II. 1. When L. C. cards are received, the call number is set up and run if there are ten cards or more.
2. If subject and other headings are to be added, the procedure is the same as in 1–2, 6–8 above.

III. Shelf cards and book cards.
1. Copy for the shelf card is furnished by the shelf-lister from the first (main) copy. It is not left to the multigraphers to determine the form of shelf card and book card entry from the catalog card copy. They are not always identical. For instance, shelf cards and book cards for pseudonymous fiction may be under pseudonym but the catalog cards are under real name.
When L. C. cards have been ordered, there is no attempt to connect the multigraphing of the shelf cards and book cards with the preparation of the L. C. cards. The books go forward without waiting for the arrival of the L. C. cards.
2. Shelf card, book card if multigraphed, and catalog card if ready, are put into book.
3. Accession number is then typed separately on shelf card. Branches type accession number on their own book cards. Shelf cards are arranged conveniently for reviser.
4. Shelf-listing is revised.

IV. Call number and accession number are *written* on pockets, the branches doing their own.

4. Addressograph. The Addressograph has found favor in a few libraries, but its adaptation to catalog card reproduction has not yet been sufficiently perfected to bring it into general use. It will probably be considerably cheaper if the proper standards of work can be reached.

5. Photostat. The photostat is a specially constructed copying camera which makes the photographic reproduction directly on sensitized paper. It is a part of the equipment of many libraries and is used mainly for reproducing pages in books, articles, or even entire books. Its advantages are at once apparent when one realizes that it gives an absolutely

accurate copy of print. But while it is a copying camera, it is not a duplicating device, making it too expensive usually to use for reproducing catalog cards. It has been used for copying cards when but one copy, say the author card, is all that is required. Cards can be photographed in blocks or sheets by this process and cut afterwards. In this way a new catalog can be built up with comparative speed. If, for example, the library had grown so large that an official catalog became necessary, it could be made by means of photoprints reproduced from cards in the public catalog, or photoprints could be made for those cards which could not be secured from the Library of Congress, although it would undoubtedly be cheaper to buy cards from the Library of Congress than to photoprint cards for the whole catalog.

Card catalogs can be reproduced in page form by means of the photostat by placing the cards on a flat surface and photographing them. Special lists for posting, or even proof copy for printing may be prepared in this way. Some very interesting research in the application of photographic processes to the reproduction of catalog entries is now under way, but as yet (1929) these are in too experimental a stage to include here.

References

CHANGES ON LIBRARY OF CONGRESS CARDS

Bishop, W. W. Preparation of L. C. cards for the local catalog. In his Practical handbook of modern library cataloging. 2d ed. Williams, 1924 (1927), p. 78–81.

Lane, W. C. Printed cards at Harvard University. Library Journal 36: 548–50. November, 1911.
How the Harvard catalog was transformed from a catalog on small cards to a catalog composed of standard cards and made to conform to headings following L. C. rules.

Ohio Library Commission. Proposed changes in printed catalog cards. Public Libraries 9: 321–22. July, 1904.
Ways in which L. C. cards could be printed to make them more useful to the small public library.

U. S. Library of Congress. Card Division. Handbook of card distribution. 1925, p. 21–31.

——— L. C. printed cards, how to order and use them. 1925, p. 8–13.

DUPLICATING DEVICES

Addressograph. In American digest of business machines, compiled by J. H. McCarthy. American Exchange Service, Chicago, 1924, p. 89–97.
Description of the machine. Illustrated.

Bishop, W. W. Practical handbook of modern library cataloging. Williams, 1924 (1927), p. 108–11.
Hectograph, multigraph, typewriter, and hand copying.

Crawford, Esther. Cataloging; suggestions for small libraries. Library Bureau, 1906, p. 20–23.
Some practical suggestions in the use of duplicators for catalog cards. Shows what was undertaken 20 years ago.

Drury, F. K. W. Labor savers in library service. Library Journal 35:538–44. December, 1910.
Considers briefly some of the devices available (1910) for duplicating written matter, and shows their comparative value in library work.

Duplicating machines. In American digest of business machines, compiled by J. H. McCarthy. American Exchange Service, Chicago, 1924, p. 244–74.
Description of various kinds with illustrations and prices.

Duplicating processes; adapted from an article in the Scientific American. Librarian 4:43–45; 159–61, 1913.

Philip, A. J. The production of the printed catalogue. Atkinson, 1910, p. 18–26.
Home printing of catalog cards. Gives English practice only.

Root, A. S. The future development of college and university libraries. Library Journal 39:811–15. November, 1914.
Shows what economies can be attained by use of mechanical duplication of catalog cards and how the field of work of the cataloger can be increased thereby.

TYPEWRITER

Fisher, C. P. The typewriter in cataloging and shelf-listing. 1903. Reprinted from the Medical Library and Historical Journal 1: 201–04, 1903.

Typewriters. An American digest of business machines, compiled by J. H. McCarthy. American Exchange Service, Chicago, 1924, p. 391–421.
Analysis and cuts of all important models with a brief description of each machine. Costs are given. Includes portable and noiseless models.

U. S. Library of Congress. Card Division. Handbook of card distribution, 1925, p. 88–92.
Methods of adding headings to L. C. cards, giving adjustment of typewriters, red versus black ink, and choice of type.

WANDELL, CAROLINE. The typewriter for card catalogs. Library Journal 27:268–69. May, 1902.
The relative merits of various machines with tables showing models used in about fifty libraries.

MULTIGRAPH

LOS ANGELES PUBLIC LIBRARY. Annual report 1924–25. (37) p. 11–12. Possible economy through duplication of catalog cards.
Results show economy is dependent upon quantity purchase of individual books.

Multigraph. In American digest of business machines, compiled by J. H. McCarthy. American Exchange Service, Chicago, 1924, p. 250–54.

NEWBERRY LIBRARY, Chicago. What has been accomplished by use of the multigraph. Library Journal 40:553. July, 1915.

RANEY, M. L. Multigraph and the flexotype in cataloging. Library Journal 36:629–32. December, 1911.

THOUGHT QUESTIONS

1. Criticize the Ohio Library Commission plan as published in Public Libraries 9:321–22, July, 1904.
2. If the local unit card is made more simple than the L. C. printed card, and both cards are used in the same catalog, what editing would be necessary if a portion of the catalog were to be printed in book form?
3. Explain why the economy of duplicating cards is based on quantity production.

Chapter XVII

Organization and Administration of the Catalog Department

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I. Reasons for Organization

In the preceding chapters the following primary factors have been considered: (1) the purpose, function, and theory of cataloging and classification with a brief description of three systems of classification and three styles of catalogs,

and (2) the main duties of the cataloger and the records necessary to accomplish these with some explanation as to how some of these duties have been performed. It now remains to show how a library should organize the classification and cataloging service not only so it will fit into the whole library scheme, but so it may be conducted along scientific lines and give the best returns from sane and economical administration.

Reference has already been made in Chapter XV to the new problems of organization and administration introduced by the use of Library of Congress cards, and the chapters (XIII and XIV) on the care and routine of books as they pass through the catalog department have served to show how great is the bulk of work entailed in classifying, shelving, and cataloging even a medium sized book collection.

As soon as cataloging assumes such proportions as to demand the full services of one or more persons, the questions of the best methods for handling the work must be apprehended, and a plan must be made to care for an ever growing organization.

We have observed that there are two different angles to the work, mental and mechanical. Such a combination of duties, radically different in type, which must be carried on by persons working in close proximity requires an organization somewhat different from a department where the work is more nearly uniform. There is no very sure means of measuring the efficiency of the mental side of cataloging and classification, but the other side, handling of materials (books and cards), can be both standardized and treated in a mechanical way.

Here, perhaps more than in any other department of the library, must there be a central coordinating influence to insure harmonious development. A glance at the annual reports of many libraries will show that probably more money and time have been spent in reorganizing the records, reclassifying and recataloging the books in the collection than on any other one item. It is economy to do a thing right the first time, and especially is this true when one is working with a catalog which

becomes more complex and more intricate with the addition of each new book. The work of the cataloger never reaches finality; no catalog is final; every book has its successor; and sooner or later every book shelf must be extended. In order that the staff may develop with the institution, they must be given ideals, and be trained in habits of mind that will instinctively plan each piece of work in the best way, avoiding inefficient procedure.

II. Work to Be Included

The main duties involved in cataloging and classifying books have been outlined in the preceding chapters, but in actual practice libraries will differ greatly both in the quantity and kind of work assigned to catalogers, or included in a catalog department.

The duties should be clear cut and as definite as possible, for the department is one in which successful administration is dependent on careful planning. It is impossible to prepare a schedule of operations for this division without a knowledge of what is to be included in its program of work.

It is very easy for the catalog department gradually to absorb much of the record work of the library. One detailed job after another is frequently transferred to this division to be carried by assistants who are capable of doing accurate work. There is great danger in thus crowding the catalogers with minutiæ which are irrelevant to cataloging. Binding records, serial records, and others of like kind have a relation to catalog records, but their upkeep does not belong in a department where assistants are responsible for analyzing and classifying books and are already maintaining a number of records pertinent to these duties. Too often the department is asked to assume extra work without an adequate number of assistants, with the result that the books are a long time in getting to the shelves and the catalog is not up-to-date.

Another drawback often encountered is the use of the department as a training school for new assistants. Untrained staff members can get experience in the catalog department without coming in contact with readers, and will not, therefore,

provoke criticism for the library during their apprenticeship. Those executives who realize that much of the success of other departments of the library is dependent on the accuracy of the records and the correct classification of books, will not retard the work of the catalogers by allowing inefficient assistants to practice in a department where accuracy must be maintained by constant revision, nor will they require catalogers to do all kinds of clerical work which is irrelevant to cataloging and classification.

III. General Policies

In organizing a department within an organization one will naturally apply to each part many of the policies and regulations of the whole. These usually affect the relation between departments, such as questions of personnel, hours of work, vacation periods, sick leave, and salaries.

In planning his schedule of work the librarian delegates certain duties to each department, and it is incumbent on the head of the department to carry on the work following the general design, but to bring to it a knowledge of the technique of the special field. By constant and careful study of the whole library and of that part in which his interest is centered, the department head should take his place not only as an assistant who is to carry out the directions of a superior, but an expert bringing to the organization suggestions and proposals for bettering the work. He must be on the alert to embrace every opportunity not only to meet the present situation but to prepare himself to assume new obligations and added responsibilities.

The chief librarian is willing usually to leave the details to the expert who has specialized in a particular field, if he can be sure that the large policies of administration are not to be overshadowed by details. Therefore the head of the catalog department should not fail to discuss interdepartmental relations with his chief. He should not, however, bring into such conferences the detailed questions of cataloging which usually have no real bearing on the administrative question. Cataloging, like other lines of work, has its fundamental principles,

its reasons for certain procedure. The cataloger knows that these must be observed if results are to be accomplished and he must be ready always to defend these principles and present his reasons in such a way as to disarm criticism.

Complaints will come to a catalog department, of course, for it touches closely every other department and follows methods not generally well understood. Naturally when readers are waiting for books not yet prepared for circulation it is the catalog department which seems to be clogging the machinery. Therefore, definite reasons for delay, or apparent laxity, should be given. But in no case should a recital of detailed difficulties which beset the department be poured into the ears of the uninterested listener. Catalogers must by no means be obsequious or willing to accept humbly every complaint that comes. Such an attitude is fatal to any organization. They must admit due criticism, but defend their methods and procedure with definite statements.

The catalog must reflect the best judgment of every member of the staff; therefore suggestions for its improvement should always be heeded. Naturally, the use to be made of such suggestions or observations must be left to the head of the catalog department, but he must be broad enough to realize that excellent suggestions can come from both staff and readers, that frequently some suggestions can come only from them, and that the catalog he is making is not *his* tool nor that of the department, but that it belongs to the library staff and the library patrons.

A systematic study of the needs of each department should be made from the point of view of the catalog. Certain policies must be decided in conference because there are cases in which the directing force must consider the share this department is to take in carrying out definite undertakings affecting the policies of the whole library. For example, if a new branch is contemplated, it is the catalog department which must get the books ready for the shelves, and must therefore know the approximate size of the proposed collection, the date of opening, and what foreign collection, if any, is likely to be included. Without this information the cataloger will be

unable to make efficient plans, and the service will be crippled in consequence.

It is advantageous for the head of the department to take part in staff meetings where the selection of books is under discussion. Should the technology department, for example, buy an expensive book because it contains a good list of patents, the cataloger should immediately note the fact so that the catalog may not fail to call attention to this list. Again if readers are demanding certain books in process, the cataloger can learn of this from members of the staff and see that these take precedence over others in less demand. From the staff meeting he can learn what the branches are buying, what the clubs are studying, why the schools are duplicating certain titles, and can gather other information vital to his own work. This contact helps the cataloger to see his work from the point of view of the staff and makes him alert to its opportunities.

The statistics to be kept by the catalog department should be decided upon by the librarian and the head of the department at the beginning of the fiscal year, for it is impossible to go back and compile figures after the books and cards have left the department. Decision will eliminate any possible embarrassment which may arise later in the year if figures called for had not been kept.

IV. Interdepartment Relations

1. General. Cordial relations between all departments of the library are necessary for effective work. Reciprocity tends to improve the service and to infuse into the staff a feeling of unanimity of purpose.

a. Exchange of assistants. In some libraries, departments exchange assistants by regular schedule. Such interchange is nearly always agreeable to the cataloging assistants because it gives them experience in different branches of the work and may bring them in contact with the public. The advantages to the departments may be unequal. The assistant who comes to the catalog department often finds it difficult to pick up a piece of detailed work when he is not familiar with the rest of the technique of the department, and the records sometimes suffer

when they fall into the hands of such a person. In theory the plan is good and should receive consideration.

Catalogers are usually better prepared by the nature of their work to assist in the reference department than in any other. In return, they are able to bring back to their cataloging duties valuable observations about the use of the catalog which will ultimately help to make the reference work more effective.

b. Supplying information about books in process. Much time is given to locating books in process in the catalog department. While an effort is made to keep books in order when they are being worked with, it is not always possible to locate an individual book quickly. The assistants in the catalog department must all be trained to waste as little time as possible in such a search because there are many demands made for help in finding books. The danger to avoid is the tendency of every member of the department to join in the hunt, with the result that five or six persons follow each other around, each looking in the same places for the book. Each assistant must be so familiar with the routine that a book in process can be quickly found.

c. Publicity work. The results of cataloging are frequently of use for publicity purposes. Duplicate lists of new books are made for posting, for sending to newspapers, or for listing in bulletins, and in some libraries the department is responsible for exhibition shelves where new books and special collections are displayed. If the library prints a staff paper, the catalog department sometimes supplies a list of new subject headings added to the catalog during the month as information to the general staff. Opportunity to become aware of all that is going into the catalog materially helps the assistant who must make constant use of the catalog and know its latest additions.

Stories about the book collection are often of interest to those who never get behind the scenes in a library. A recital of the travels of the copies of *Alice in Wonderland* to the branches, to the schools, to the deposit stations until the copies become worn out and must be withdrawn and replaced by others, makes an appeal to the outsider who has no conception of the number of copies of this book traveling around the city.

Even the system of keeping records has been known to interest one newspaper reporter who wrote a very readable article on "How the library keeps track of its 50,000 circulating collection." Another newspaper printed an account of the classification, emphasizing the fact that the books were so arranged as to show the proportion of volumes in each class of literature. This was called "How the library knows the balance of subjects in its collection."

2. Definite departments.

a. Acquisition or order department. In the organization plan of some libraries, the two processes, ordering and cataloging, are combined under one head, but the greater number divide the work into two departments. Since the catalog department receives most of its material from the acquisition department, there must be a close connection between the two. The ordering department is dependent on the catalog for information in regard to duplicates, replacements, differences in editions, and similar questions, and the catalog department in turn looks to the order department to transmit such information as will facilitate the work of the catalogers.

The records of each department must be studied by the other in order to prevent duplication of work and to use what has already been prepared by either. For example, the order cards passed on to the catalog department furnish a list of books in process which is equally valuable to the two departments and to the public departments as well. Some libraries keep these cards either in the order or catalog department in a tray marked "Books received," until such time as the catalog cards are filed in the official or public catalog; then they are transferred to a tray marked "Received and cataloged," or are discarded.

b. Reference department. Mention has already been made of the exchange of assistants between the reference and catalog departments. It is to the reference department that the catalogers should turn for their greatest help, for the two departments are doing work similar in character and equal in importance. Those who prepare the catalog should study the needs of the reference assistants, should talk freely with them

about the efficiency of the catalog, and the help it gives or fails to give. They must often ask the reference librarian to suggest reference books to aid in research, and must get his point of view about subject headings, references, guide cards, filing, and analytical entries. The catalog is given its severest test by the reference department. If it does not answer many of the questions which come to the reference desk it is faulty and should be revised.

The cataloger should be ready to listen to adverse criticism, but he welcomes as well the words of appreciation of the catalog which sometimes come over the reference desk from readers. Those who spend much of their time behind the scenes in a library, as the catalogers do, must depend on the other members of the staff for much of their inspiration, moral support, and relief from concentration; and a bit of praise for good, honest effort is a tonic which goes far to stimulate a feeling of fellowship and to spur one on to greater effort.

If the reference librarian can give the time to reading over the catalog cards just before they are filed in the catalog, he will find it an excellent way to familiarize himself with new headings, references, analytics, and other entries. This has been tried in some libraries to the great advantage of both departments.

c. Circulation department. Connections can be made with the circulation department, similar to those suggested in the case of the reference department. All information gathered by the assistants at the circulation desk which will lead to bettering the catalog should receive consideration by the catalog department, and on the other hand any added information about the use of the catalog which the circulation assistants can get from catalogers should be encouraged. There is a great opportunity to explain the catalog at this point of the service, and telling results might be accomplished if concerted effort were made to introduce readers to this valuable tool.

One catalog department keeps, at the loan desk and at the reference desk at the central library and at each branch, a blank book in which assistants make note of questions asked

and not answered by the catalog. This book is returned to the catalog department at the end of each week; the questions are taken up one by one; and an answer is written opposite each question. The following questions and answers are taken from such a book:

Q. Can all the books on automobile touring be entered under *Automobiles?*
A. No, because the books are not about automobiles. This kind of question should be answered by a special *reading list* and not by the catalog.

Q. Cards under Milton are soiled. May we have new ones?
A. Cards will be ordered at once.

Q. No card in the catalog shows that we have *volume 4* of the Harvard 47 workshop plays.
A. Official card is already corrected and printed cards are ordered. Will add v. 4 in pencil to your cards.

Q. Hammond's Atlas is not listed under *Geography.*
A. The two atlases by Hammond are listed under the headings *Commercial geography* and *Maps. Collections.* Geography has not been used in this sense. A "see also" reference refers to these headings.

These questions give the cataloger an opportunity to know how the public is using the catalog and the answers show the assistants at the desks what the catalog can and cannot do.

d. Special departments. Catalogers should not fail to take advantage of the knowledge of the experts in charge of special departments, such as technology, medicine, art, and music. Advice from them as to classification and subject headings will often help to settle a doubtful point.

Some specialists, such as children's librarians, prefer to assign subject headings and class numbers to books for their own departments. If such cooperation is to be successful, it is best for the cataloger to revise the work so that uniformity and consistency in the catalog will be preserved.

Catalogers can frequently be of service to special departments by calling to their attention new books or parts of books which may not file in their special division but will, nevertheless, be of interest to them.

V. Personnel

1. Professional and clerical assistants. It has been shown that the duties of the catalog department can be divided between professional and clerical assistants. The proportion of assistants in the two groups varies with the organization of the library, the quality of cataloging, and the size and type of library.

The ratio in a large public library is about one professional to two clerical assistants if Library of Congress cards are used, and if mechanical processes are used for duplicating records. This means that one cataloger can plan work enough to keep two clerical assistants busy. The revision of this work can be divided between professional and routine revisers. This method relieves the professional cataloger of all unnecessary routine so that he can devote his time to bibliographical work.

Professional and clerical assistants are needed equally in public and university libraries, since the modern methods of cataloging provide work for both types of assistants. In addition to these the college, university, and normal school libraries usually have another grade of assistant ranking between the professionally trained and the clerical worker. They usually begin as student assistants and are trained to assist in the cataloging. These assistants carry a grade of work far above that of the clerical worker and frequently bring to the department not only scholarship but also the language equipment so much needed in cataloging. After some experience they become proficient in their special branch of the work and may be more useful to the library than students who are professionally trained, but lacking in experience. Naturally, their value to other departments of the library is limited because they lack the comparative knowledge of library methods which comes with formal training in library science.

2. Educational requirements. Professional assistants for classifying and cataloging should be chosen only from among those with college education (or its equivalent) together with formal library training and linguistic equipment.

The languages most needed are French, German, Italian, Latin, and Spanish. Special collections of books for foreign readers in the minor languages may be cataloged by a part-time assistant since these books are relatively few in number. Experience is a further requirement for revisers and first assistants. Staff members in these positions are the "professional assistants," or "professional catalogers" or "classifiers."

The non-professional assistants, as has been noted, are college trained but have not had formal training in library science. *Clerical assistants* may be divided into two groups: (1) those doing preliminary searching, revision of records, typing, filing, and other supervised tasks, and (2) those doing page work, which includes moving books, sorting cards, bringing books from the stack, and similar duties. Those in the first group should have had a high school education, or a business school training, while those in the second group need grammar school training only.

3. Traits. An effort has been made throughout this text to present the duties of the classifier and cataloger in such a way as to bring into relief the traits needed to carry such duties successfully. But it is necessary here to emphasize the value of trait study in the consideration of personnel. This study can be of advantage for:

(1) Teaching traits, by indirect or direct methods, and in connection with the phases of instruction to which they apply directly
(2) Grading assistants in a library (by the librarian or head of a department)
(3) Grading one's self (by the assistant) and hence training to improve self
(4) Staff training systematically as a result of (2) and (3)
(5) Sizing up assistants for a special purpose
(6) Selecting assistants for particular duties

As W. W. Charters says, after listing the traits for the circulation librarian:

> "If we possess the traits in our list in high degree, we become expert workers, and by our expertness we advance the cause we love. If we do not possess these

traits, we are inefficient to the degree in which we lack them. Traits thus become the standards of performance of our duties."[1]

Among all the traits of the cataloger *accuracy* has usually held the first place. This is natural because inaccuracies in our catalogs are indeed very serious. To give to readers and staff the incorrect number of a book, the wrong date of publication, or an incomplete citation will discount not only the work of the cataloger but also that of every member of the staff. But is this the trait which we should strive to develop first in training students and assistants to become expert classifiers and catalogers? By placing the emphasis on accuracy are we beginning with a quality from which other qualities, equally essential, will develop? The author of this book is ready to answer this in the negative, because in her judgment this is neither a fundamental trait nor a quality which has the elements of growth. To be accurate is to do the thing before one with precision. It is not a character-developing trait nor does it give the student the correct conception of the work to be done. If we emphasize this quality first we are developing one habit only. Would it not be more worth while, and more just to the student, to emphasize the broader side of classifying and cataloging? Then the traits of performance will be brought into relief, their importance will be realized and the desire to cultivate them will be a natural one.

Belief in work, or, to be specific, belief in cataloging and classification, seems to the author the fundamental trait for everyone who is to take up this work. Unless the cataloger believes that by means of classification books can be made more easily accessible, and by cataloging them the staff and readers are better able to use them, every duty which the cataloger is asked to perform will be carried out in a mechanical and half-hearted way. But with the conviction that what one is doing is vital and indispensable to the success of the organization will come an impetus to acquire all the qualifications which will perfect one in his chosen line. Belief in work

[1] Flexner, J. M. Circulation work in public libraries. A.L.A., 1927, p. 281.

gives the individual something to build upon; therefore should it not be given first place in outlining a plan for the development of assistants or in helping them to develop themselves?

After belief in work the cataloger must possess a certain kind of book knowledge. Love of books does not give the cataloger his equipment. He must know books not alone as the reference and circulation librarian know them, but in their relation to the whole library collection. The cataloger does not answer definite inquiries alone by classifying and cataloging books. His aim is rather to make comparison of books possible by correlating subjects, grouping each author's works, and furnishing a key to the books which will facilitate the work of every member of the staff as well as answer the requests of many of the readers. This must all be done with *accuracy* and it requires a certain *mental curiosity;* an inquiring mind which will find out why one book is different from another, what relation one subject has to another, what variety of names an author has used. In other words, the cataloger must show research ability and be able to interpret books written in any language.

Certain other traits in addition to belief in work and accuracy must be taken for granted, like our manners, because they are common to all kinds of library work. These are judgment, professional knowledge, memory, neatness, system, health, dependability, patience, forcefulness, industriousness, adaptability, imagination, initiative, intelligence, and speed.

Character traits of a cataloger, defined in terms of trait actions illustrating each, were compiled by the American Library Association Library Curriculum Study and are reprinted in Appendix II of this text. For further explanation of this study and definitions of terms, the student should read the chapter prepared by W. W. Charters on "The Personality of the Circulation Librarian" in Jennie M. Flexner's book entitled *Circulation work in public libraries.*[1]

4. Securing the staff. In a small library the librarian

[1] Charters, W. W. The personality of the circulation librarian. In Flexner, J. M. Circulation work in public libraries. A.L.A., 1927, p. 274–93.

assumes all responsibility for the whole staff, but where there is departmental organization he selects the head of the department and transfers largely to him, in consultation with the chief executive, the responsibility of choosing and supervising his own staff. Therefore, the head cataloger must be ready to recommend new assistants or to offer suggestions when vacancies occur.

a. Sources. The best sources for trained assistants are: (1) the schools where training in library science is given. As these schools differ somewhat in the emphasis given to cataloging and classification, it is well to ascertain which schools are best equipped to give this instruction. (2) The American Library Association. This Association keeps a list of persons who wish to be considered for appointment. (3) Professional intercourse, meeting the catalogers now in the field. (4) Training classes. This source of supply offers the opportunity to observe students for several months, and to test their adaptability to the work. Some students from such classes can be put into the non-professional class and promoted to higher positions if work is satisfactory, or they may make good clerical assistants who can take up more advanced work later. (5) The "opportunities" column in professional journals. This method of securing employment is becoming so popular that it behooves librarians to scan these columns. (6) Finally, schools of business and public high schools, for clerical assistants, especially typists. The training in system and business methods is very valuable to the library, and just such expert technique is needed in many catalog departments.

b. Interviews. Personal interviews are desirable. To be reassured by the applicant himself that the work offered is understood and appreciated goes a long way in satisfactorily filling positions in the catalog department where the attitude towards the subject is a large factor in successful work.

c. Probation period. A period of probation may be of advantage to the department and to the new assistants, especially if those assistants have never served in a library or are unfamiliar with cataloging in actual practice. Such a temporary appointment gives both the assistant and the executive

the right to discontinue the contract at their option. The time should be at least three months.

5. Hours and schedules. The hours of work are usually the same in all departments, averaging from thirty-eight to forty-two hours with a half-holiday each week and a vacation period of from three to four weeks after one year of service. Some libraries make a difference in the vacation time granted to professional and clerical assistants. Vacations for catalogers are sometimes definitely assigned to be taken during the summer months when the work in this department is light. One library has found it economical to keep only one or two assistants in the department in August so that all assistants can go and return at the same date.

Because the assistants in the catalog department are not obliged to answer to the direct demands of the public, a fixed schedule is not so important as in the departments where public desks must be covered. However, it is usually more satisfactory for each assistant to hold to a rather definite schedule. Then if exceptions *can* be made, they are more keenly appreciated.

Time taken out for other than library duties should always be made up, and such periods should not be allowed to cumulate. Assistants should arrange with the person in charge for necessary absence from the library, and plan, if possible, to have their work carried, at least in part, by other assistants. Time sheets are required in some libraries, and are appreciated by those assistants who want to keep to a close schedule and to prove their strict attendance. The psychological effect of such an exactitude is considered by some to be bad for the morale of the staff. Their use might be put to vote.

6. Staff organization. The professional and non-professional staff should be directly responsible to the head of the department, who, with the first assistant, outlines the duties of all assistants. The first assistants and revisers assume the responsibility for the details of cataloging, and pass on the uniformity, accuracy, and consistency of work done by the catalogers.

There is little or no need of strict supervision when work-

ing with a group of professional workers. They should be left free to work out their own problems and be allowed to develop their work as best suits their peculiar habits. Naturally, they will realize the necessity for conforming to certain rules and regulations which the institution enacts. System and mechanism are necessary auxiliaries to any work, but they cannot be substitutes, and much has been accomplished by scholars without regarding them too rigorously.

Clerical assistants should be supervised by a person qualified by training, experience and temperament to guide people without friction. In fact, the chief qualification for such a position is the *ability to get work done*. This does not mean the ability to drive employees to unusual feats, nor to push work through in record time at the expense of other equally important duties. It means the ability to judge the comparative importance of the various kinds of work assigned, and to get that work done in the order of its importance. An assistant's ability to plan and to attend to the execution of work of this character will result in the following advantages: (1) development of a mobile force capable of handling large quantities of books and cards, (2) economy due to careful supervision, (3) separation of the routine clerical work from the professional work of the department.

7. Staff rules and regulations. All new assistants should be instructed in the rules of the library. A printed folder containing all regulations is sometimes provided by the library. When such directions are put into the hands of new assistants there is no excuse for not knowing what is expected from them in the way of conduct and attitude.

Department rules are of two kinds: (1) those affecting the personnel and (2) those concerned with the technique of the work. The catalog department should keep either a card file or loose leaf book file of all its rulings. There are so many details connected with the work that it is too much to expect a new assistant to know even a part of the routine followed by the department. Only by constant reference to such a file as we have mentioned can he increase his knowledge of departmental practice. Such rulings should include the full routine

for handling books, classifying, assigning subject headings, book numbers, keeping shelf-list records, maintaining official catalog and public catalogs, handling Library of Congress cards, manifolding cards, filing and other decisions.

Most catalogers will find it unnecessary to repeat the cataloging rules which are contained in printed codes, such as the *A.L.A. rules;* they can, however, supplement the printed codes with additional rules so that they will be applicable to the local library. Care should be exercised to inform every assistant of changes in decisions and to notify him of any variation in the routine. Each assistant should be consulted when changes are contemplated affecting his special work. This is one way of developing and keeping interest and allowing the assistant to see the importance which is attached to his own work.

VI. Planning and Assigning the Work

1. System of classification to be adopted. Chapters III, IV, and V have discussed certain factors which the administrator must consider in determining the best classification scheme for his library. These may be summarized as follows: (a) The use to be made of the books and the clientele to be served; (b) Open or closed shelves.

a. Use to be made of the books. The clientele served by the library has a large influence in determining its classification. The special library might use a system very different from that adopted by the public library, and the university or reference library might require still another.

Consideration must be given to the inter-relation between libraries, particularly those of the same type, the interchange of material, and the readers who want to pursue their studies in different libraries. As one of the objectives of library organization is to save the time of the reader, it is plain that this can be done more effectively if uniform systems of book classification are followed. The public libraries are now feeling the good results which come from training children in schools in the use of libraries; and group workers, such as county librarians, and commission workers, are finding great

advantages in having all the libraries within a certain radius classified by the same system. Professors and students who go from one university to another can do better work if they are not obliged to learn a new system of classification in each institution.

b. Open or closed shelves. If the library allows free access to shelves, a very close classification of the books would be confusing to the readers in a public library, but, on the other hand, if the stacks are open only to research workers, as is often the case in college and university libraries, a close classification will better answer the needs.

2. Types and kinds of catalogs. The two most common types of catalogs already considered have been the dictionary and the classified, and it is understood that the choice will be made between these two types unless a very special kind of library is to be cataloged. We have already observed that the classified catalog is less frequently used than the dictionary type, leading one to believe that only a special library would want to adopt that form.

a. Official catalog. The primary purpose of the official catalog is to answer questions of catalogers and classifiers, but it is so frequently used by assistants from other departments, especially from the order department, that their needs must also be given careful consideration. Such a catalog can be limited to full author entries and full added entries for personal names, names of societies, institutions, and government bodies. This catalog will be a constant help to the cataloger in keeping all entries consistent. Subject entries for books can be excluded, but the card list of subject headings can be filed in this catalog alone with the author entries, if desired. Such entries will contain only the name of the subject (with no reference to any book) but with "see" and "see also" references noted to and from the subject listed on the same card. The authority author cards can be filed in this catalog if desired. Some large libraries have found a combined official catalog and L. C. depository catalog a very convenient tool.

The full *author* card, or main card, in this official catalog

must contain, besides the full imprint and collation used by the library, the *tracing* of all subject headings, added entries, series, title, and analytical cards, as well as the *location* of books if catalogs for outside agencies are maintained. The official card will be a Library of Congress card, if these cards are used; otherwise the process slip may be made in such form as to serve as the official card. If no process slip is used, a typewritten card can be made by the cataloger. This card should be stamped "Official card" to prevent confusion with other cards when it is taken out of the catalog. Since the official catalog is not used by the public, it may contain notes as to authors, notes of reference, and other information which could not go into a public file.

b. Centralized cataloging.[1] The question of centralized cataloging within one library system is vital to those libraries having outside agencies, such as branches, school collections, or station collections, and also to university libraries where separate catalogs are maintained in departmental collections, graduate reading rooms, and independent collections. From the economic point of view there is no disputing the advantages of centralizing the cataloging of the whole system in one department. Here are accumulated in one place the best reference books, adequate supplies, and trained assistants, and finally, the Library of Congress cards which can be automatically prepared for extensive distribution at little cost. The central or union catalog can show the resources of the entire collection, and at the same time the separate collections may be given catalogs of their own books, uniform with that in the central library. The same arguments may be used in advancing the advantages of centralized classification.

In highly specialized departmental libraries large enough to afford an independent staff it might be more satisfactory to have the cataloging done by assistants working in these special libraries. They are usually more intimately acquainted with the needs of the users and more familiar with the literature to be cataloged.

c. Catalogs for outside agencies and special collections.[1] In

[1] This subject is also touched upon in Chap. XIV.

general, it is a great advantage to have the catalogs and shelf-list records for outside agencies conform to the central catalog; otherwise the expense and intricacies of preparation are greatly increased. This is especially true of a dictionary catalog where the net-work of references is affected by any change in subject headings. It is, therefore, customary to make these catalogs of duplicates of cards already in the central catalog. The use of a unit card reduces the work to a mechanical process, as has already been noted in earlier chapters of this text. The same subject headings can be added to the cards for all catalogs and one or more additional card catalogs can be compiled at little cost.

d. Special catalogs for young people. Many libraries maintain a separate catalog for young people. This is necessary if the library wishes to simplify its catalog for children. It is impossible to mix adult and juvenile subject headings in the same catalog, and to have the catalog satisfactory to the two classes of readers. If the juvenile dictionary catalog is separate, the subject headings can be phrased more simply, more analytical entries can be made, references can be introduced without conflicting with those for adult books, and the catalog as a whole can be made more easily intelligible to children. This separation should apply to branches as well as to the central catalogs.

e. Suggested catalogs. The duplication of catalogs necessarily depends upon the size and organization of the library, but a fairly complete list will be given here as suggestive to the librarian who is planning rather full cataloging. No one should consider making them all unless there be a proved need, a sizable budget, and a large staff.

(1) Official catalog
(2) Dictionary catalog of all books in the system
(3) Dictionary catalog of circulating books
(4) Dictionary catalog of books in the reference collection
(5) Dictionary catalog for each branch of its own books
(6) Dictionary catalog of all juvenile books in the system
(7) Dictionary catalog of juvenile books in each branch, kept at the branch
(8) Dictionary catalog of each special collection, as Technology, Music, Art, etc.

(9) Classed catalog (one card per title only) for books in foreign languages, as French, Italian, Spanish, etc., arranged by broad classes, as Science, History, Literature, etc.

(10) Classed catalogs, for the whole collection, or for special collections, made by duplicating cards and filing by call number in shelf-list order.

f. The card repertory. This phrase is used for those card catalogs which show what books may be found in other collections than that of the local library. The Library of Congress cards are the basis for such a catalog (called the depository catalog), and into this may be filed cards from other libraries printing and distributing catalog cards.[1] In addition to the printed cards available, multigraphed cards are now distributed by the libraries of the University of California, the University of Illinois, Johns Hopkins University, University of Chicago, and the Newberry Library, Chicago.

Such an accumulation of cards forms an invaluable tool for the cataloger, as well as a general reference tool, the value of which is inestimable for bibliographic work. Only the national library and the largest university libraries are justified in maintaining such a complete auxiliary catalog. Fortunately, many libraries are able to keep up the Library of Congress depository catalog, which alone is a most valuable addition to any bibliographical collection.

g. Selective cataloging. Little space can be given to this subject but it is one which must be considered by every cataloger in charge of a rapidly growing collection. Methods for simplifying the cataloging of certain little-used books is what is now meant by selective cataloging. It involves the study of classes of books according to their use and the elimination of certain details from the catalog cards as well as certain entries from the catalog.

3. Order of duties.

a. Separation of classification and cataloging. The first question which always confronts the head of the catalog department of a large library is the advisability of separating the two major duties: classification and cataloging. The difficulty of arriving at the solution is due to the effect each plan

[1] For list of libraries printing catalog cards, see Chap. XV.

has both on the work and the worker. If, for example, all the *subject* work, including the classification and assignment of subject headings, is in the hands of one person, there is no doubt that great economy is gained. But by this plan the catalogers are left with only the bibliographical details of cataloging, which often become irksome when shorn of the subject interest. If the catalogers are given the cataloging and subject heading work and the classifier keeps the classifying only, the catalogers may have more interesting work, but the division of the *subject examination of the book* is less economical from the administrative side, and there is likely to be a loss of uniformity and balance between the classification of the books on the shelves and the subject entries for the same books in the catalog. Here again, the kind of library and the material to be handled must be considered before a decision can be reached. In libraries where it is the custom to assign certain classes of books, as History and Literature, to catalogers who are specialists in these fields, it would seem best for these specialists to classify, assign subject headings, and otherwise complete the cataloging. This policy is followed in some university libraries, while in others the classification work is in the hands of a separate group of workers.

In the public library the following division of work is sometimes made: The *circulating books* are classified and cataloged, and subject headings are assigned by the regular catalogers. *Reference books and serials* (usually more difficult and requiring a knowledge of languages) are classified and subject headings are assigned by one person, while the catalogers complete the catalog entries, that is, catalog the books in all particulars except assigning the subject headings.

The influencing factors in this division of work are: (1) classes of books to be handled, (2) qualifications of assistants, (3) classification in use, (4) amount of labor turnover resulting, and (5) the importance given by the library to the economic results. It is probable that a greater output can be attained if the classification and subject heading work is combined in one operation. This is quite sure to be the case if Library of Congress cards are generally used; they reduce the

cataloging to a routine process. One or two catalogers can give directions for changes in these cards to be carried out by clerical workers, thus reducing the number of persons on the professional staff.

Very often assignments of work must be made according to other groupings. For example, all books in a certain language may be given to an assistant well versed in that language; and again, an assistant trained in children's work catalogs and classifies all the juvenile books.

b. Schedule of duties assigned to positions. The assignment of duties naturally hinges on the order of duties chosen for classifying and cataloging. The public library of about 100,000 volumes would probably assign duties somewhat as follows:

(1) *Head Cataloger*

General supervision of the department and the interdepartment relation
Assume responsibility for all work done by the department
Classify and catalog difficult books
Revise work of first assistant
Examine finished work of catalogers

(2) *First Assistant* (Cataloger)

Revise cataloging
Catalog and classify non-fiction not cataloged and classified by head of department
Have general oversight over work of the department
Revise filing

(3) *Second Assistant* (Clerical)

Do preparatory work for cataloging, following directions of catalogers
Catalog fiction
Revise added copies
Supervise work of clerical assistants
File in the public catalog
Revise typing

(4) *Third Assistant* (Clerical)

Assist first and second assistant by searching and verifying names, comparing entries in the catalog, etc.
Record added copies and withdrawals
Shelf-list and assign Cutter numbers
Receive and check L. C. cards

(5) *Fourth Assistant* (Clerical)

Type or duplicate cards
Add tracing and headings to these cards
Make corrections on L. C. cards
Sort and arrange all cards preparatory to final filing

The public library of 150,000 volumes would probably add one more cataloger and one more clerk. The large public library of 300,000 to 500,000 volumes would add in the proportion of two or three clerical assistants to each cataloger, or classifier.

When a library reaches a 75,000 volume mark, complications begin to arise both in classification and subject headings which require that more time be given to these two duties and therefore that additional expert assistants be secured.

c. Revision. It is very necessary that the final revision of such detailed work as classifying and cataloging should be in the hands of one or two persons. Revisers become familiar with all routine, see things in their entirety and in their relation one to another; therefore they are in a position to unify the output of the department and bring the results of the various assistants into alignment. Such revision should not in any way relieve the individual cataloger from revising his own work at the time it is done.

The reviser, working from the book, revises all cards which have been prepared by the cataloger. This may mean only one card if the unit form of card is adopted. The revision must include all details of uniformity, bibliographical exactness, spelling, punctuation, capitalization and form. The same care must go into this scrutiny as that given by the copy reader in an editorial room of an important magazine. In fact, it is more difficult to revise one unit, like a catalog card, than to examine an article which is held together through the development of a definite subject. After details have been revised, the choice of author entry, subject headings, analyticals and other principles of entry must be checked.

Sometimes the question is asked: Is the library justified in doing such careful revision, or could the time given to this work be more profitably employed? The answer to this question is summed up in our table of values. The catalog is being

prepared as a permanent record; it is to be used year after year by hundreds and perhaps thousands of readers. Unless it is accurate the service which the library is striving to give cannot be accurate. If the library assistants are led astray in their endeavor to find some bit of information which the catalog failed to give, the time saved by not revising is used by assistants who must search blindly for the book which the catalog should have located. The important thing is to get a true perspective so that a finally just proportion of time can be given at a strategic point in the whole library system. The cataloger must learn to observe and measure his work with the library yardstick, not with a foot-rule which belongs only to the catalog department.

When all is said and done, every department is working for one thing, which is service, and if careful revision in the catalog department will contribute towards better service it is justified. The reviser should be a person versed in both cataloging and classification so that he may be able to revise both the classification and cataloging at the same time if necessary.

The reviser of routine records and duplicated cards does not need to know the reasons why a thing is done, because his work is simply a question of following copy. Much of it consists of proof reading.

Revisers must insist that all records, whether permanent or temporary, be legible, and clear in statement. This is doubly necessary where directions are given for someone else to follow. A professional or clerical worker who is unmindful of clarity and neatness cannot expect to be a successful assistant in a catalog department.

VII. Cataloger's Reference Library

Books are the most important tools for catalogers. Therefore, a few of the most used reference guides must be within easy reach of assistants in the catalog department. This collection must include the technical tools, such as codes of rules, lists of subject headings, and classification schedules; also handbooks on cataloging, such as those of W. W. Bishop, Dorkas Fellows, and Susan G. Akers; handbooks of classifica-

tion, as Sayers' *Manual of classification,* Merrill's *Code for classifiers,* and the pamphlets issued by the Library of Congress Card Division; printed catalogs of other libraries; periodical book reviews and book lists, such as *Readers' Guide, Book Review Digest, The Booklist,* and library bulletins. Style manuals, like those issued by the University of Chicago and by the H. W. Wilson Company, are useful to annotate for the staff to follow. Filing rules, also annotated to fit the local library, must be in the collection, or better, given to each assistant.

The foreign language dictionaries most needed should be in the catalog department, but others can be examined in the reference department and so save duplication. The same is true of biographical dictionaries. The *Century cyclopaedia of names* should be one of the fixed tools because it is all-inclusive; and a guide like Hyamson, *Dictionary of universal biography of all ages and all peoples* (1916) should be within reach since it locates an author quickly and furnishes a key for further search. The catalog department can use a *Who's who in America* which is a year older than the current issue, and thus save buying an extra copy. The most expensive books can be used in the reference room unless that department is far removed from the catalog department. Those larger libraries which can afford the *Catalogue* of the British Museum and its supplements are indeed fortunate since it is the best tool a catalog department can possess. It should be shelved in the catalog room.

Assistants should realize that the reference book immediately accessible must constantly be supplemented by bibliographic and other tools. Reference has already been made to the *Guide to reference books* by I. G. Mudge as being the best guide for the cataloger to follow in choosing books for a reference collection. This with the annual supplements reprinted from the *Library Journal* should be shelved in the catalog department.

A card list of references to books and articles helpful in cataloging, including works in other departments of the library, is an invaluable help to catalogers and gives a *library*

on cards which can be added to daily. Current books should be watched as they go through the department and likely helps should be added to the card library. One member of the catalog staff may be made responsible for the care of the collection, but each one should contribute to its growth.

VIII. Reports

Reports from the catalog department vary from those made daily to an annual statement. The department should keep statistics in such shape that at least monthly reports can be made. A written report not limited to statistics should be prepared annually. Such a report gives the head of the department an opportunity to put before the librarian problems touching the personnel, or the work which may have developed during the year. The report should contain suggestions for the promotion of the work, for changes in methods, alterations in equipment, or requests for new furniture, shelving or supplies. It may be the culmination of suggestions or reports made by the assistants in the department.

IX. Statistics

Statistics should be reduced to a minimum because they may become a time-consuming nuisance to catalogers. Some catalog departments keep great volumes of computations which are seldom used and which rarely pay for the time spent in their compilation. Individual catalogers are often irritated by the requirements for keeping an account of every card prepared and every book handled.

Some count should, of course, be kept of work accomplished and books handled, but only the most important and telling items need be included. The output of each cataloger is considered necessary by some executives, but whether or not it is necessary for an assistant to continue keeping figures after the pace has been set is an open question. The time devoted to statistics would better be given to cataloging. Some libraries place one person in charge of the compilation of statistics, thus relieving each cataloger of this routine. The shelf-lister can easily make the count of books added and withdrawn as

books are added or taken from the shelf-list record. A card for each class can be kept on which daily work is recorded and these can be cumulated and transferred to printed form sheets at the end of the month. The Library Bureau has a satisfactory form called "Classified record of additions and withdrawals" which can be used for recording these statistics.

1. Statistics of added copies. Statistical records should distinguish new titles from added copies. While this distinction is not made by all libraries, it is one of the most telling methods of presenting accurately the work done by catalogers. Frequently the question is asked "How long will it take to catalog, or recatalog, 40,000 volumes?" The answer to this question depends on the number of different titles represented by the 40,000 volumes. It takes less time, for example, to catalog one title issued in ten volumes than to catalog ten volumes if each has a separate title. Therefore, statistics should show a distinction between added copies and new titles.[1]

2. Suggested statistics. The following plan for statistics is offered as adequate for showing the work of the average catalog department. No one library will probably want to keep all these separate items.

(1) *Books*
- (a) Books added and withdrawn by classes
  - New titles } A sheet for each collection
  - Added copies } if needed
  - Net gains or losses
- (b) Books classified
- (c) Books cataloged

(2) *Cards*
- (a) Library of Congress cards purchased
- (b) Catalog cards (first copies) prepared by catalogers
- (c) Catalog cards typed
- (d) Catalog cards duplicated
- (e) Cards filed

(3) *Miscellaneous*
- (a) Number of subject headings assigned
- (b) Analyticals classified for the shelf-list or the classified catalog

[1] See Appendix IV.

3. Definitions. No uniformity seems to exist as to the interpretation of certain terms, therefore it is almost impossible to make any comparative use of statistical tables issued by libraries. In 1912 the Newberry Library formulated some rules and definitions for compiling statistics which may be studied with profit by those who would be uniform in their counting.[1]

X. Cost of Cataloging

Few definite results have come from the attempts to estimate the cost of cataloging a single book. As W. W. Bishop has written in his *Practical handbook,* "cataloging costs can be figured in time and results, but hardly in money, as not only do salaries vary, but kinds of work other than cataloging, strictly so-called, done by the various employees vary greatly in different institutions." Few libraries have yet grappled with the cost accounting problem; therefore, the cost of departmental work has not received separate scientific consideration. With the growing use of Library of Congress cards and the greater uniformity in methods resulting from them, it may soon be possible to arrive at more definite figures. When this is done, a combination survey might be made by librarians and expert cost accountants. About all that is known is the fact that the cost of cataloging increases with the size and character of the book collection.

Catalogers cannot afford to overlook the economic side of classification and cataloging. It is an expensive business at best and should be watched at every turn. Efficiency methods of management, leading to standardization where it is feasible, will reduce costs without interfering with the scholarly side of the work. A table showing the usual items to be considered in computing costs has been added as Appendix III of this text.

XI. Printed Forms

One of the most effective means for reducing costs is the use of forms which save time and increase accuracy. A form

[1] Definitions and rules for compiling statistics of books in the Newberry Library. Library Journal 37: 262–63. May, 1912.

is a printed blank used as a standardized guide for the recording of information or communication. By the use of such blanks, information is entered in uniform, condensed form, and nothing is left out. The blank should be of such size as to file into standard cases, should bear the name of the library, and should be arranged for typewriter spacing. Colors may be used to distinguish records.

The catalogs of library supply houses will show what library form cards and blanks have already become standardized and are carried by the trade.

XII. Moving Material

Some attention was given to this topic in the chapters on routing new titles but it will bear repetition here for emphasis in connection with economical organization.

Material should pass along in direct line, without retrogression and with few transfers, and it should be delivered in a manner to eliminate handling or lifting by assistants in so far as possible. In order to accomplish efficient handling apply the following rules:

1. Know every kind of equipment which will aid in your work
2. Analyze material routine carefully
3. Visualize the needs of each worker
4. Buy for economy in operation, not in first cost
5. Teach assistants the maximum possibilities in their equipment
6. Arrange all equipment for the convenience of the greatest number

The purpose of a plan is to anticipate and prevent, to the greatest possible extent, interruptions in operation and loss of output due to bad order or broken-down equipment and supplies. Too few book trucks and too little shelving space have often retarded the output of books and caused discontent which might have been avoided by wise expenditure for mechanical equipment.

XIII. The Work and the Staff

Good work can come only from a good staff. The making of a good staff of catalogers does not stop with selection. Real

return should not be expected from new assistants under six months, and a longer time must be allowed for those who take up classification or subject headings. Many discouragements face the beginner and every consideration must be allowed during this time of orientation.

One of the most urgent and important duties of the head cataloger is to study the assistants in relation to the work they are to do, and to appreciate some of the difficulties under which these assistants are working. It has been said that the power of an organization is the result of its constructive and aggressive forces minus its resisting forces and that an administration should find itself mainly engaged in directing the energies which create themselves naturally in all parts of the organization. Catalogers perhaps more than other library workers need a directing force which will show them the compensations to be derived from their work and help them to give a just value to the routine which might become too great a resisting force if carried alone. To work constantly with books and have no contact with readers is fatiguing, for after all books lack animation and offer little relief from the silent thinking which makes up the cataloger's day. Some relief through change of work is one way of lessening the strain, and definite plans should be made to provide assignments for assistants which will break the routine and rest the mind. Catalogers can so easily fall into ruts and jog along with an even tread, unmindful of their surroundings; therefore it is imperative for the success of the department that this danger be constantly watched for and thwarted.

If the catalog is to reflect the needs of the staff and the readers, those who make it cannot afford to hold themselves aloof from the library's activities. This has been one of the dangers which faces the cataloger. Support of the head of the catalog department and also that of the librarian is needed to give emphasis to the fact that catalogers must consider themselves not only an important part of the library scheme, but also a live group of workers essential to its success.

There is no surer way of gaining the loyalty of a staff than for the chief executive to express to the assistants who

work behind the scenes in a library, his sympathy in and appreciation of their work. Catalogers are usually most painstaking and conscientious workers, and those who secure their loyalty and respect gain better service and build up an *esprit de corps* which strengthens any organization. Such loyalty is always reciprocal. The feeling which the assistant entertains for the institution is usually reflected in his attitude towards his work.

Assistants must be given every opportunity to experience the reactions of those who use the catalog and to come in contact with other catalogers working along parallel lines. They should be encouraged to attend meetings and to take part in discussions where self-expression is possible. Contact with people will give them a sense of the value of their special work in the library scheme. When they see the dependence of every library assistant on the catalog, and how catalogs of other libraries become the tools of every librarian, they will come to realize that much of the effective use to be made of books is in the hands of the catalogers.

References

GENERAL

Akers, S. G. Cataloging problems in smaller libraries. Public Libraries 27:470–72. October, 1922.
Suggests organization and personnel of a small library catalog department.

Alford, L. P., ed. Management's handbook. Ronald Press Co., 1924. Certain chapters will be found suggestive to the cataloger planning and organizing a department.

American Library Association. Classification and cataloging. In its Survey of libraries in the United States. A.L.A., 1927, v. 4, p. 7–118.

——— Departmental catalogs. In its Survey of libraries in the United States. A.L.A., 1926, v. 1, p. 190–91.

Hanson, J. C. M. Some aspects of the cataloging situation. A.L.A. Bulletin 16:241–42. Papers and Proceedings, July, 1922.

Hopper, F. F. Administration of the catalog department from a librarian's point of view. A.L.A. Bulletin 7:259–67. Papers and Proceedings, July, 1913.
An excellent survey of the subject told with understanding and sympathy.

JENNINGS, MRS. J. T. Cataloging experience a fundamental requisite in library work. Libraries 33:173–77. April, 1928.
Relation of cataloging to other branches of library work.

MCCULLOUGH, R. D. Correlation of the work of the catalog department with other departments of the library. Michigan Library Bulletin 17:5–7. January–February, 1926.

PILLSBURY, A. M. Cataloging for the small library. Library Journal 51:1078–80. December 1, 1926.

ROSHOLT, RUTH. Organization of catalog departments. Public Libraries 28:550–51. December, 1923.
A short article outlining the organization of work.

SAYERS, W. C. B. Classification and library administration. In his A manual of classification. Grafton, 1926, p. 213–22.

SEARS, M. E. Cataloging for department libraries. A.L.A. Bulletin 7:325-30. Papers and Proceedings, July, 1913.
Form, scope, contents, and administration of departmental catalogs. Conclusions based on questionnaire.

——— Organization of a cataloging department. A.L.A. Bulletin 11:207–11. Papers and Proceedings, July, 1917.
Purpose, economy, duties, grading, distribution of work, revision, maintenance, and esprit de corps.

SMITH, LAURA. Administration of a catalog department from a cataloger's point of view. A.L.A. Bulletin 7:271–74. Papers and Proceedings, July, 1913.
Advocates centralized cataloging, gives standards for work, and emphasizes the need of a knowledge of books.

TUCKER, M. M. Catalog department and its bibliographical work outside the department. A.L.A. Bulletin 16:244. Papers and Proceedings, July, 1922.
A certain amount of extra work is done by the Harvard college library catalog department but "outside" jobs are paid for.

TURNER, H. P. Who catalogs the small library? Public Libraries 27: 472–74. October, 1922.
Assignment of work in a small library. Advocates use of L. C. cards and elimination of Cutter number.

UTLEY, H. M. How the re-classification and re-numbering of 60,000 volumes was done in the Detroit public library without closing or stopping the circulation of books. Library Journal 16:c20–22. December, 1891.
Change was made from a fixed location plan to Dewey classification and Cutter book numbers.

WINSER, BEATRICE. The relation of the catalog department to other departments in the library. A.L.A. Bulletin 7:268–71. Papers and Proceedings, July, 1913.
Limited to public libraries. Contains some excellent practical advice.

COST AND ECONOMIES

American Library Association cataloging test at Yale and Columbia. Library Journal 42:110–12. February, 1917.

American Library Association. Catalog Section, 1925. Committee on Cost of Cataloging. Plan for an investigation into and report on the cost of cataloging. A.L.A. Bulletin 19:278–86: Papers and Proceedings, July, 1925.
A historical survey of the subject up to 1925 is followed by an analysis of the problem.

Bishop, W. W. Ascertaining costs and number of cards for a book. Library Journal 31:270–71. June, 1906.

——— Catalog costs. In his Practical handbook of modern library cataloging. 2d ed. Williams, 1924 (1927), p. 58–60.
Contains a short bibliography on cataloging costs.

——— Some considerations on the cost of cataloging. Library Journal 30:110–14. February, 1905.

Currier, T. F. Cost reduction in cataloging. A.L.A. Bulletin 12: 243–47. Papers and Proceedings, September, 1918.

Editorial on cost of a complete set of Library of Congress cards. Library Journal 50:456. May 15, 1925.

Hanson, J. C. M. Cataloging test in the University of Chicago library. Library Journal 40:399–400. June, 1915.
Refers to cost test.

——— Some aspects of the cataloging situation. A.L.A. Bulletin 16: 241–42. Papers and Proceedings, July, 1922.

Josephson, A. G. S. The cataloging test: results and outlook. Library Journal 41:654–57. September, 1916.
Cost of cataloging. Results of tests made by thirty-eight libraries.

McCartney, G. B. Cataloging economies: how Rochester economizes. A.L.A. Bulletin 12:247–48. Papers and Proceedings, September, 1918.
Economy of ordering, disuse of Cutter numbers.

Root, A. S. Next steps in library cooperation. Library Journal 47: 587–90. July, 1922.
A plea for standardization which will reduce costs.

PERSONNEL

Bishop, W. W. Organization of the cataloging force. In his Practical handbook of modern library cataloging. 2d ed. Williams, 1924 (1927), p. 53–65.
A general outline of the work of the department, including salaries and hours.

The cataloging situation. Library Journal 46:645–46. August, 1921. Also in A.L.A. Bulletin 15:73–77. July, 1921.
Report of the American Library Association subcommittee on the Training of catalogers.

Hiss, S. K. Training of catalogers in relation to the needs of the large public library. Public Libraries 27:463–65. October, 1922.
By the chief (1929) of the catalog department of the Cleveland Public Library.

HOWE, H. E. Qualities of a good cataloger. Library Journal 49: 361–66. April 15, 1924.
A study of traits in catalogers and clerical assistants.

PETTEE, JULIA. Wanted—catalogers. Library Journal 46: 543–45. June 15, 1921.

WALTER, F. K. Cataloging situation. Public Libraries 27:465–67. October, 1922. Also in A.L.A. Bulletin 16:236–40. Papers and Proceedings, July, 1922.
A good review of the personnel side of the work, including discussion of titles and rank given to catalogers in university libraries.

SELECTIVE CATALOGING

CURRIER, T. F. Selective cataloging at the Harvard library. Library Journal 49:673–77. August, 1924. Also in Van Hoesen, H. B. Selective cataloging. Wilson, 1928.

ROSHOLT, RUTH. A selective catalog; plans for making the large catalog usable. A.L.A. Bulletin 16:257–58. Papers and Proceedings, July, 1922.
Revolving catalog in reference department shows by colored cards what books have been added each year. Attempts to make the catalog a living tool.

VAN HOESEN, H. B. ed. Selective cataloging; catalogers' round table, American Library Association, July 3, 1924, by T. Franklin Currier and others. . . . Wilson, 1928.

THOUGHT QUESTIONS

1. Mention some specific advantages to the catalog department in exchanging assistants with the reference department.
2. What would be the advantage of combining the order and catalog departments under one head?
3. Explain what you understand by the mental and mechanical side of cataloging.
4. In what branch of the work of cataloging can scientific management methods be applied? Explain.
5. Make an outline which you would follow if you were to take your first position as a reviser in a catalog department.
6. What points would you offer to the librarian who asked for some arguments in favor of using the Dewey Decimal classification in a library of 40,000 volumes?
7. Outline a plan for developing the following traits in a cataloger who is deficient in them: Accuracy, Judgment, System.
8. Mention ways in which the catalog department can be of service to other departments.
9. In your opinion should assistants at the circulating desk be required to pass an examination on the use of the catalog? Explain.

Chapter XVIII

Quarters, Equipment and Supplies

I. Planning the Quarters
   1. Space
   2. Location
   3. Lighting
   4. Furniture

II. Catalog Cases
   1. Specifications
   2. Equipment of trays
   3. Location of the public catalog
   4. Size and placement of cases

III. Catalog Cards
   1. Price of cards
   2. Card stock
   3. Punched cards
   4. Plain cards vs. ruled cards
   5. Quantity of cards needed
   6. Guide cards
   7. Spreading the cards

IV. Miscellaneous Equipment
   1. Book trucks
   2. Electric eraser
   3. Filing chair
   4. Rubber stamps
   5. Other equipment

V. Desk Supplies

VI. Trade Catalogs of Library Supplies

I. Planning the Quarters[1]

1. Space. The space allotted to catalogers may vary from a single desk or corner to a series of well-equipped rooms. In the early days neither librarians nor architects realized that adequate space was needed for cataloging. A few books were carried to a desk where they were cataloged, marked, and put back on the shelves; then a few more

[1] The author is much indebted to W. W. Bishop for permission to take certain facts from his book, Practical handbook of modern library cataloging. Williams, 1924 (1927).

were put through in the same way. This was a long process and resulted in slow service. As libraries began to increase their facilities for making books accessible, catalogers had to work with greater speed; books had to be cataloged in larger quantities and methods had to be evolved for handling them; more floor and shelving space was required, with the result that today quarters for cataloging, classifying, and preparing books for the shelves are carefully planned for the most effective service. In new buildings ample space is allowed for the storage of books while in process, for generous desk room, for moving material, for filing cabinets and for expansion. Librarians realize that all these factors are contributory to better administration and service.

Mr. Bishop makes the statement that "If a library now has ten or a dozen persons employed in cataloging work, it will be well to plan for at least fifteen to twenty persons in providing space in a new building."

2. Location. The catalog room should have access to as many other departments as possible. This means a central location, and on the same floor with the order and reference departments if this can be arranged. The public catalog should be easy of approach by the catalogers, but if an official catalog is maintained in the department this feature is not so essential. First consideration must be given to readers in locating the public catalog, not to the cataloging staff. The catalog room should not be a passageway because the passing of people through a department where concentration is required, is disturbing to workers. Direct access to the stacks is desirable, and a lift should be provided for sending books to different levels of the stack room.

3. Lighting. The lighting of these quarters is most important for cataloging requires constant use of the eyes. Large windows, properly shaded, which can be opened easily to furnish good ventilation, should be provided, as well as a generous supply of floor plugs for electric desk lights. Both overhead and desk lights are necessary since books must be located on the shelves, and typing and close work must be done at the desks. The catalog cases should have lights

running along the top so that light will be thrown into the trays when they are in use.

4. Furniture. Shelving, desks, and chairs are the most important articles of furniture.

Book shelves should be generously provided. Too many catalogers have been hampered in their work by being forced constantly to move material because of inadequate shelving. Wall shelves are desirable, as well as an arrangement of shelving to form alcoves. The alcove shelving can be lower than the wall shelves in order not to cut out light, and it may then serve as convenient table space for handling oversize books, maps, prints and broadsides.

"A cataloger's desk (5 x 2½ feet), chair, bookcase and a truck of books with floor and aisle space for free movement will require a space of *at least* 10 feet by 6, or 60 square feet of floor. A minimum of 100 square feet to a person is usually allowed in planning offices of this sort. The desks should be placed with reference to light from the windows, so that the light comes naturally on the left of the catalogers when seated at the desks."[1] The equipment of the flat-top desk should include drawers for filing cards and other records. A table should be placed before the reference book shelves, and tables for handling large books and maps should be provided unless low shelving is installed.

It is well to have the fixed furniture include a stationary wash-stand inclosed in a closet; the handling of dirty books and pamphlets makes this a real necessity. Lockers for supplies are best built into the room and also a work table. Such a table has been planned with a flat top covered with plate glass which is easy to clean, and an upright series of pigeonholes built at the back where the working supplies can be kept. A roll top slide covers the pigeonholes.

II. Catalog Cases

Good catalog cases are so expensive that executives are inclined to question the necessity of having standard makes.

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[1] Bishop, W. W. Practical handbook of modern library cataloging. Williams, 1924 (1927).

The cataloger should take every opportunity to convince the librarian that a case of standard measurement and good material is a necessity, and that it is cheaper in the long run than one which may sell for less money, but which is continually out of repair, difficult to use and soon worn out. Certainly such standards must be followed in buying or building cases for *public* use; card trays are not handled carefully by the readers, but are usually jammed back into place after having been knocked against the edge of the opening. If the wood is soft and poorly finished, the case soon becomes marred, and the partitions become loosened. Therefore, the well-built case is a necessity.

The trays too must be exact in measurements, finish, and equipment. Cards will not turn easily on the rod which holds them unless the sides of the trays are smooth and unless the width is true. Cards are cut to a standard size and a variation of a fraction of an inch in the inside measurement of a tray will cause them to stick.

Some libraries have found satisfaction in having catalog cases built into the room by a cabinet maker. Careful specifications should be given as to measurements, attachments, and locks. A sample tray should be provided and the contractor should be required to assume all liability for infringement of patents.

If there must be economy in catalog cases, cheaper cases can be used for the official records. Some firms furnish fairly good cases of standard size, but the trays are not equipped with angle blocks at front and back. This lack would not be serious when the trays are for official use only.

1. Specifications. The most approved case is the unit case. This has an interchangeable top and base which allows the blocking of several cases together. By this method the capacity of the catalog can be expanded indefinitely. Each unit is made of six, eighteen, or more trays built for 7.5x 12.5 cm size cards, the standard size now used by all modern libraries. The capacity of the trays depends upon the weight of card used. One can figure on a capacity of 1500 light weight, 1100 medium weight, or 900 heavy weight cards per

tray. "Medium" weight is the weight of the Library of Congress printed card. The length of the tray varies, which of course affects the capacity (the standard depth now is 17⅜ inches); it is safe however to use the above figures in estimating the space needed for storing a new catalog.

The following specifications were published by the librarian of the University of Minnesota when the new library building was under discussion, and may prove helpful to one whose problem is the same:

> "Card cabinets. Alternative bids will be received for cabinets in solid sections of 60 or 72-drawer units or for sectional cabinets of 12, 15, or 18-drawer units, with detachable bases and tops. The dimensions of the completed unit in either case should be approximately 60 inches high with 19-inch base, 33 inches to 42½ inches wide and 17 inches deep. Each drawer must be equipped with follower and rod for Library of Congress cards (7.5 x 12.5 cm) All bids must state approximate working capacity of each drawer in terms of medium and heavy stock cards. (Sample of Library of Congress cards showing size and stock are enclosed.) 60-tray card cabinets for 7.5 x 12.5 cm catalog cards, or equivalent capacity." [1]

Small libraries can buy a single unit case and add another unit when the demand comes.

2. Equipment of trays.

a. Angle blocks. Each standard tray has an angle block at the front to allow cards to fall into a natural position when being turned.

b. Follower blocks. Follower blocks, of wood or steel, hold the cards in place when the tray is not full.

c. Rods. A metal rod passes through the front end of the tray and through the perforation in each card and insures against the disarrangement of cards and also their removal by any but library assistants. Some rods lock with a key while others screw into the front of the tray. Each tray

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[1] Walter, F. K. Library furniture specifications. Library Journal 50:165. February 15, 1925.

should be cut low on the sides if cards are to be turned and read easily.

d. Label holders and labels. Brass *label holders* on the outside of each tray are generally too small. If the case is being built to order, a label holder having an opening 3⅛ x 1 in. is a better choice than the smaller 1⅞ x ½ in. which is often used.

Many libraries mark each of the public catalog trays with a number and add the corresponding number on the case opposite each tray. This is done to insure the return of the trays to the right places and thus preserve their alphabetical order. Colored markers may be used for each row of trays so that a tray out of place can be easily detected. One library has used printed celluloid buttons with numbers in different colors.

Labels should be as clearly marked as possible. For large labels, one of the most satisfactory methods is to use a typewriter equipped with large type. This gives a very clear label, large enough to be read at some distance. India ink is also very satisfactory and can be made to last by giving the label a coat of shellac after the ink has thoroughly dried. A piece of transparent celluloid or isinglass slipped into the holder over the label is a great protection from dirt. A very careful selection of inclusive letters should be chosen for the caption. Marking should cover the alphabet with no gap anywhere. If, for example:

Cards in tray are:	Label mark is:
1. Babbitt—Banks	1. Ba—Banks
2. Bannister—Bazaar	2. Bann—Bazaar
3. Beal—Bertrand	3. Be—Bertrand
4. Best plays—Bible	4. Bes—Bible
5. Bibliography—Boston	5. Bibli—Boston

The following extract from the Annual Report of the Cleveland Public Library will show how one large library worked out the problem of labeling the catalog trays.

> "By far the largest single piece of work undertaken by this Department (Catalog) in preparation for the new building has been the making of the labels for all the catalogs, shelf-lists, etc. During February the con-

tents of the cases were divided by markers to show where the shifting would come, and the lettering for the drawer labels was drawn off in sheets to correspond with the division indicated. The Library Bureau supplied cut stock for the labels and a special heavy-faced Royal typewriter was used in printing them. The labels were then pasted on scrap sheets of heavy paper and two coats of shellac were applied—the first, turpentine shellac to set the ink and to act as a filler, and the second, alcohol shellac to give a hard coat. By using shifts to keep the typewriter going ten hours a day, and putting several assistants from time to time on the pasting and shellacking, something over 10,000 labels were made in six weeks. According to a rough estimate the time spent on the labels amounted to about 650 hours, or the time of one assistant for fifteen and a half weeks."[1]

Labels on official files are as important as those on files for the public. A catalog poorly labeled, or not labeled at all, is indicative of very shiftless work.

3. **Location of the public catalog.** The public catalog should be located, if possible, where it is convenient for both staff and readers. If there is a "readers' adviser," his desk should be near this catalog.

Some large libraries have a public catalog room where the cards for books belonging to the complete library system are filed. Others divide the catalogs, placing in the reference or some other room a complete catalog of the whole collection and limiting the catalog in the open shelf or circulating room to the circulating books. The juvenile catalog, in cases low enough for children to consult, should be located in the children's room.

4. **Size and placement of cases.** The catalog case should not be so high as to cut out light or to be out of reach of the person of average height, nor so low that labels on the lowest trays cannot be read.

The space available, of course, determines the arrangement of the catalog cases. The alcove plan, which relieves conges-

[1] Cleveland Public Library. Annual report ending March 31, 1925, p. 102.

tion, gives an aisle between cases where tables can be placed for holding trays when in use, and is perhaps the most compact arrangement. Each case should be plainly marked to show what letters are included in each alcove. A large lettered placard on the end of each case will direct the reader. Single letters at intervals on the top of each case are also helpful in locating parts of the alphabet. White enamel letters can be seen at a distance.

Cases are usually supplied with slides which hold the trays when in use, and many libraries supply cork covered tables at which readers can stand or sit when studying cards in a single tray.

III. Catalog Cards

It is understood that some L. C. cards will be used, and as has already been said, the cards used to supplement them should be as near the same weight and color as possible and exactly the same size. The same stock should be used for catalogs and shelf-list but a cheaper grade can be used for lists of subject headings, authority lists, and other official records. No cards should be accepted which are not exact in size (7.5 high x 12.5 cm wide). Very frequently pressure is brought to bear on catalogers to use cards just a little off size, but it is always a fatal mistake to yield to such a petition; as has been said, they will not fit into the cases, will be difficult to turn, and will cause untold dissatisfaction.

1. Price of cards. The cost of cards fluctuates, but the medium weight standard size cards at the present time (1929) cost between $4.00 and $4.50 a thousand; the lighter weight are $3.50 to $4.00 and the heavy $5.00 to $6.00.

2. Card stock. Cards constantly handled will fray at the edges, break at the corners, and soil easily unless the stock is good. A poor paper will become rough when erased and will blur the ink. The constant turning of the cards gives them hard wear, and unless a tough stock is used the cost of replacing will exceed the first cost.

A new type of catalog card is now on the market which is supposed to have some advantages over cards previously offered. These are made entirely of rags, which insures their

wearing quality, and as they are resistant to moisture they can be sponged as if of celluloid. Some libraries are already trying out these cards, but it is too soon to offer any results as to their value.

3. Punched cards. Cards must be accurately and uniformly punched. The round perforation is used in libraries, but as other forms are on the market, it is necessary to specify the kind wanted.

4. Plain vs. ruled cards. Since the typewriter has come into general use, cards without ruling are to be preferred. By using the tabulator on the typewriter the correct spacing is easily followed.

5. Quantity of cards needed.[1] In ordering cards the number needed must be carefully computed according to (a) the number of records kept, as catalogs, shelf-list, and other official card records; (b) the use made of Library of Congress cards. For example, if the latter are not used for the shelf-list, one blank card must be provided for every set of Library of Congress cards ordered for a single title; (c) the cards needed to supplement Library of Congress cards in the catalog, as those for additional analytical entries, references, or series; (d) the average number of cards needed in cataloging when no Library of Congress cards are available; (e) the allowance which must be made for waste.

All catalogers should be given thin cards or slips the size of the catalog cards to use for all temporary notations; otherwise the expensive catalog cards will be used. It is well to let assistants know the cost of cards and the quantities used so that they may realize more fully the significance of waste.

Used cards should never be destroyed until they have been used on both sides and even then they can be utilized as mounts for clippings. Care should be taken to scratch all waste cards so that they will not get back into the records.

6. Guide cards. These cards, as the name implies, serve as guides to the reader in his use of a card list. Guide cards correspond to the tab index letters often attached to a book index. The card has a tab which projects above the other

[1] Appendix III.

cards and which is so arranged as not to obscure the view of another guide card in the tray. On these tabs are printed, or written, the index entry. Various styles have been put on the market, made of metal, paper, or celluloid. The most satisfactory one is probably the bristol board guide on which the caption is printed and the whole tab protected by a transparent covering of celluloid. These can be secured from the trade in almost any combination, from a set of A to Z to those bearing subject headings ready to file into the dictionary catalog. The latter are based on the printed lists of subject headings. A library not able to use the ready printed guides can make its own list of captions and have the printing done and the celluloid covering put on by a firm doing such work.

Many libraries write their own guide cards, using a buff colored guide card and adding the caption in India ink or by typewriter. A coat of shellac over the tab will keep it clean and take the place of the celluloid covering.

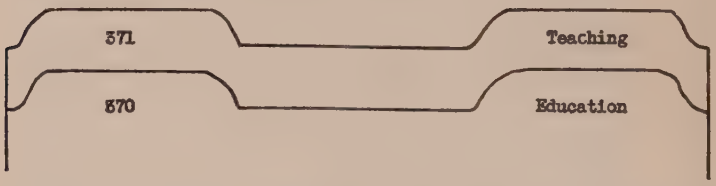
a. Marking of guide cards. Guide cards should be very freely used. Not more than one hundred cards should go unguided unless the file is on one topic, and even then a designation of subdivisions is helpful.

Guides may make or mar a catalog according to the intelligence used in choosing the index entries for them. It is a most difficult thing to do well, and there are few rules to help one. If complete words are used the reader usually expects to find only cards bearing that word behind the guide, and, therefore, misses the cards beyond; and if letter combinations are used, some few cards are certain to be lost because all cannot be included. Probably the best method is to use both words and combinations of letters. For example, a group of cards for Tennyson should have the word guide *Tennyson* and other guides in the same tray might read as follows: *Tent, Ter, Tes, Tex,* etc.

Each time catalog cards are filed in the catalog attention must be given to the guides. New entries will make some guides obsolete while new guides will be required to care for a new group of subjects.

b. Guides for shelf-list and classified catalog. Class num-

bers should be written on the guide cards for the shelf-list and the classified catalog, since these determine the arrangement of the cards. To make these files more useful a double indexing method can be used. At the extreme left of the tray, file the numbered guide cards, and at the extreme right of the tray file guide cards on which are written the subjects represented by these numbers, thus:



Such guides are furnished by the trade, with numbers and words on one guide instead of two.

Colored guide cards may be used as subdivisions of subjects when it is necessary to distinguish one group from another. They are also useful in official files to call the attention of assistants to some special ruling, as those for book numbers in the shelf-list. They are "danger signals" which often save very grave errors.

c. Information guide cards. A standard guide card is used for explaining the use of the catalog. The caption on the tab reads: "How to use this catalog"; below are printed concise directions for finding authors, titles, and subjects in the catalog. By filing one of these guides in each tray, the rules are always before the user of the catalog. It may be placed at the beginning of the tray or inserted in the middle. These cards can be purchased from a library supply house or may be typed or multigraphed by the local library.

d. Reference guides. The reference guide is used to call attention to other material, such as Vertical file, Picture file, Trade catalogs, or Lantern slides. Such guides should not be confused with the general reference *cards* in the catalog. The trade name for these guides is "Collateral reference guide."

7. Spreading the cards. When planning for a new

catalog, space should be allowed for double the number of cards on hand. In other words a new catalog should begin with trays only half full. Nothing is more annoying than to find a tray so full that a card cannot be turned far enough to read below the center. To keep the catalog workable, cards must frequently be shifted, and there comes a time when the whole catalog must be spread out to make room for new additions. To accomplish this a careful plan must be worked out, or the assistant will be blocked and have no room for the last cards to be arranged. The following satisfactory method has been suggested by two or more libraries:

(1) Measure the cards in each tray, and total.
(2) Divide by the number of trays to find the number of cards for each tray.
(3) Assign cards to the trays making breaks in filing at reasonable points.
(4) Make temporary labels for the trays.
(5) Allow for growth by not filling trays full, by leaving empty trays for fast growing subjects, and by not using the top and bottom trays of the cases.
(6) Revise the labels by noting the first and last cards in each tray.
(7) Copy the labels on a sheet for the copyist who makes permanent labels.

IV. Miscellaneous Equipment

1. Book trucks. Trucks should be provided generously for catalogers where there are quantities of books to handle, but no cataloger should tie up a truck for days for stationary work. There are many trucks on the market. Trade catalogs should be studied and compared before buying. A truck should be very well built, should be quiet and well balanced.

2. Electric eraser. An eraser driven by motor has been used to great advantage in a library where many changes are being made on catalog cards. A rubber eraser of the flat round type is mounted on an instrument like that commonly used by a dentist to hold his drill. This is run by a small motor. The eraser revolves very rapidly and is most effective

in removing typewriting and even print from catalog cards. It does not leave a rough appearance as it takes off a very thin layer of the card. It is necessary to add a small electric fan or blower to carry the paper particles away from the operator. The fan, protected by wire guards, blows the dust into a hood. An electric eraser similar to this is now (1929) on the market.

3. Filing chair. A chair on wheels is provided for the filers in some libraries. Continuous filing is fatiguing and anything which will lessen the strain and allow the assistant to work in comfort should be adopted. One of these chairs stands on a light platform which is on wheels so that the filer can easily move the chair along by pushing against the catalog case. The chair itself is the style used at typewriters, having an adjustable back. A rest or shelf supported from the front platform holds the catalog tray while one is filing.

4. Rubber stamps. No two inexpensive devices are so worth while in a catalog department as rubber stamps and rubber type. They save time and writing, and can be used by clerical assistants without revision. Every catalog department should examine its records and use stamps wherever the same word, phrase, or number is constantly repeated. A uniform size of type should be chosen, a good stamp pad used (either black or blue), and the stamps kept clean and soft. As soon as the rubber begins to harden the stamp should be discarded, for a poor and illegible stamp is far worse than none at all.

Rubber type has already been recommended for stamping call numbers on added copies. It can also be used for short notices or forms where one or two lines only are needed; it has been set up in some libraries for stamping author and brief title on book cards where a quantity were required for the same title.

5. Other equipment. Certain equipment has been mentioned in connection with duties described in other chapters which will not be repeated here. For duplicating devices and typewriters, see Chapter XVI. A bulletin board is a quick way of getting information to assistants. Pencil sharpeners should

be at hand. Spools of gummed paper and cloth should be provided, so that assistants may mend a torn leaf or fasten in a title-page instead of taking time to send the book to another department. A numbering machine can be used when placing copy numbers in added copies, and also on book cards and book pockets. Safety razor blades make excellent erasers when print is to be removed from cards.

V. Desk Supplies

The cataloger's desk should be supplied with the regular equipment necessary to the work; there should also be cards, printed forms, and such rubber stamps as are used by the department.

Each cataloger should organize his desk so that cards and supplies can be quickly found. Guide cards should divide the various kinds of cards used by the cataloger, rubber stamps should be kept in definite order, and all small supplies should have a place so that waste of time and material will be avoided. Fountain pens should be a part of the catalog equipment, but need not be provided for each cataloger. They are convenient in making additions to cards at the catalog and shelf-list.

Typewriters may be on special typewriter desks, on a swinging arm attached to the desk, or on rolling typewriter stands. Some libraries prefer to give each cataloger a typewriter while others have two or three in the department to be used by any member of the staff as needed. If several people use one machine it should be on a rolling stand. The organization of the department and the use made of duplicating devices will determine the number of machines needed. A direction book should be with each machine and assistants must not fail to keep machines cleaned, oiled, and covered when not in use.

VI. Trade Catalogs of Library Supplies

The catalog department should keep on file the latest catalogs of firms specializing in book and library equipment. They suggest new devices and keep one informed of supplies

on the market. A directory of these firms was printed in the *Library Journal* 52:547–58, May 15, 1927.

References

Akers, S. G. Suggestions for solution of cataloging problems in small libraries. A.L.A. Bulletin 16:245–46. Papers and Proceedings, July, 1922.
Equip a "corner" for undisturbed work with adequate supplies.

American Library Association. Location of catalog. In its Survey of libraries in the United States. A.L.A., 1926, v. 2, p. 81–82.

Austen, Willard. Card catalogs: suggestions for making them usable, 1898. In Sawyer, H. P., ed. The library and its contents. Wilson, 1925, p. 361–65.
Suggestions for marking labels on the outside of trays and also guide cards.

Badger, H. C. Our catalog: what to do with it. Library Journal 17:161–63. May, 1892.
Where to locate the catalog.

Bishop, W. W. Rooms and equipment. In his Practical handbook of modern library cataloging. 2d ed. Williams, 1924 (1927), p. 20–36.

Brown, J. D. Library classification and cataloging. Libraco, 1912, p. 182–214.
Shows various forms used for filing cards. Historical.

Clark, E. E. Considerations on the card catalog and library construction. Library Journal 17:229–32. July, 1892.

Fellows, Dorkas. Guides. In her Cataloging rules. Wilson, 1922, p. 280–88.
Every student should read this practical and helpful chapter.

James, M. S. R. Card catalog guides. Public Libraries 7:229–30. June, 1902.
Use and misuse of guides with a description of some forms.

Library Bureau. How shall I catalog my library? 1903.
For the small library, gives description of the tools needed. A pamphlet.

Sayers, W. C. B., and Stewart, J. D. The card catalogue. Grafton, 1913.
Although an English book, valuable for its description of various forms of card catalogs. Illustrated.

Soule, C. C. Place for catalog cases. In his How to plan a library building. Boston Book Co., 1912, p. 244–45.

Sprague, W. R. Information as to the possibility of using fountain pens at the catalog desk. Library Journal 41:439–40. June, 1916.

——— Inexpensive markers for catalog drawers. Library Journal 47:312. April 1, 1922.
How trays were marked with colored thumb tacks.

WALTER, F. K. Library furniture specifications. Library Journal 50:163–65. February 15, 1925.
Filing cases and card cabinets are included.

WYER, J. I. Objections to metal furniture. Library Journal 37:328. June, 1912.
Should be read by anyone contemplating its use.

THOUGHT QUESTIONS

1. Show the process followed in computing the number of catalog cards needed to catalog (Dictionary) and shelf-list 18,000 titles if L. C. cards can be secured for 17,500 of the titles. Include L. C. cards and also those made by the local library.
2. What size catalog case would you need to store a catalog of 10,000 L. C. cards? Show computations.
3. What arguments would you use in asking for a standard well-built catalog case for the public catalog?

Chapter XIX

The Use of the Card Catalog

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As the proof of the pudding is in the eating, so the proof of the catalog is in its use. We may well ask the question: Does the catalog justify the great expenditure of time and money which goes into it? And if some librarians are inclined to doubt its value, what can be done to make it better understood?

In the foregoing chapters an attempt has been made to prove that the catalog furnishes one of the most important mediums between books and readers, but one frequently hears that it is not understood, is not used, is too formidable to be approached. These and other criticisms tend to make catalogers stop and consider what is wrong with their methods.

The question to be considered in this chapter is: Should the usefulness of the catalog depend upon its makers alone or should the catalogers' work be supplemented by assistants of other departments who will explain and interpret it?

I. Complexity of the Catalog

No one knows better than the cataloger how many obstructions thwart one who undertakes to use a card file. Its very form is perplexing and forbidding. Cards are tucked away

in trays out of sight of the passing reader; nothing is spread out before him in plain sight, nor can anything be made visible until he has learned to shift the gears and see how it "works." The catalog cannot be used or understood any more readily than can any other instrument which is made up of interrelated parts.

The study which has been given to the best ways and means of making catalogs has developed a fairly satisfactory and comprehensive system, but still catalogs fail to accomplish all that they should for readers. They are too complicated for the average person to decipher alone.

II. Potentiality of the Catalog

Perhaps librarians have never stopped to measure the usefulness of the catalog. It has been placed within the reach of staff and patrons, and assistants have depended upon it for certain things and have taken for granted that readers will go to it when they need a book. There is, perhaps, little realization of what the catalog can do or how far it can aid both assistants and readers in *self-service*. It has been assumed that a few readers can be reached through this medium but little real effort has been made to discover just what its potentiality should be. No psychological study has been made of the reaction of readers to the catalog. Such a study might lead to greater service, greater economy in administration, and a more general use of books, and give catalogers not only an insight into the reader's difficulties, but also awaken them to the need of basing their work on demand in so far as possible.

III. Reaction of Readers to the Catalog

In an endeavor to penetrate the fog which surrounds this question of readers and their catalog, and also to give library students some little conception of how questions are put by readers, an appeal was made to assistants working directly with the public to make a contribution to this text. They were asked to state frankly their opinion of the use of the card catalog and to get, if possible, expressions from readers as to the difficulties met in looking up material. Catalogers had

no part in gathering the information and no opportunity to make apologies for errors if the catalog failed to respond to certain questions. Assistants at the reference and circulation desks in public, university, and reference libraries conducted the interviews. There was a great desire to prove, through this survey, whether the criticism frequently forthcoming about the catalog is due to poor cataloging or to a lack of knowledge on the part of those who use it. Results show that both readers and catalogers are sometimes at fault. There are unfortunately some poor catalogs which will stand little use, but given a good catalog, one which is accurate, up-to-date, well supplied with references, and reasonably full, it should respond to most of the demands which this test brought out, provided the reader had been given some conception of how to approach it.

The vagueness of the questions asked by patrons goes to show a lack of understanding of books and subjects on their part, and many of the questions reveal the fact that broad rather than specific subjects are in the mind of the reader when he begins his search.

The pitfalls which are revealed by these interviews offer the cataloger food for thought. They may also stir the librarian and assistants outside of the catalog department to a realization of the latent power of the catalog, and may prove to them that if more attention were given to explaining how it functions, its usefulness would be greatly strengthened.

1. General comments. A student in one of the large universities recently remarked, "It took me six months to learn what a useful thing the classed catalog is, and then I learned by blundering." Probably this is the experience of over eighty per cent of freshmen and fifty per cent of graduate students; they are left to find out for themselves or they leave college without knowing what is inside the cases they have passed every day. Surely the library of every educational institution has some responsibility for bringing reference aids and library tools to the attention of readers while they are studying. The references given students are frequently vague and indefinite, requiring a great deal of in-

genuity to interpret; but if the catalog is understood, if the student knows that he can approach it from a multitude of angles, he is likely to locate his references in much less time and prepare his work to his own and the professor's greater satisfaction.

The following reference given by an instructor might seem impossible of solution unless the student knew how to use the author entries in the catalog and how to follow them up in the periodical indexes: "Several years ago I wrote an article on the history of the Sand Flat Academy. It was published in some learned journal gotten out at, or near, Vinegar Bend, New Mexico. Please find this article and read the first fifteen pages for tomorrow." Citations given in books are frequently quite as incomplete as the one just given.

Public libraries often miss opportunities because their tools are not understood. A lawyer once took a trip to Washington to consult some patent reports and was much chagrined on his return to find by accident that the file of these patents was in the public library of his home town. Libraries are advertised, but readers are not always shown the catalog which is one of the royal roads to books in the library.

2. Definite reports.

a. Why readers go to assistants rather than use the catalog. In answer to the question: Why do readers not use the catalog instead of going to an assistant? the following points were given: (1) Lack of energy on the part of the reader—some are too lazy to look up their own information; (2) Fear of the catalog; (3) Inability to manipulate the cards; (4) Lack of definite knowledge of what is wanted; and (5) Lack of familiarity with an *alphabetical* file.

A newspaper man reported as follows when asked the above question: "There are two chief reasons for that, the first being pure laziness or 'mental sloth,' combined with the human tendency to 'let the other fellow do it,' the second being the fact that many intelligent people do not know how to use the card catalog." This patron said that he usually finds the catalog remarkably clear and easy to use; that when he does have any difficulty with it, it is usually due to his own inability

to think of the proper subject headings to look under. For that reason he finds cross-references of great value and suggests that more "see" and "see also" cards and more analytics be added to the catalog. He also says that the brief critical note sometimes typed on, and sometimes put on in longhand by the librarian, is always interesting to him. This reader suggests that it would be worth while to have some newspaper man write a series of articles which "will sell the catalog to the public." He thinks "the catalog is a thing which many people could be interested in if they could be told in an engaging manner of the joys of being referred from subject to subject and having a dozen interesting books and subjects and lines of thought suggested in looking simply for one."

Some patrons look upon the catalog as something which only the assistant has the magic to unlock. They do not think it is made for their use and do not dare to approach it. Some are so indefinite as to what they want that a catalog can do but little for them, and those who have a definite name in mind are often unable to locate it because they cannot spell correctly.

b. Inaccuracies of statements. Inaccuracies on the part of the reader frequently bring criticism on the catalog. For example, a reader said he could not find *Henry Gibson* in the catalog and when the assistant asked him to tell her something that Gibson had written he cited *A doll's house* and *Hedda Gabler*. He found what he wanted after the Ibsen cards had been located for him.

"See" references sometimes lead to very amusing misunderstandings, as is illustrated by this question recently put to an assistant: "Where can I find Mr. Porter? I am looking for O. Henry's books and the catalog tells me I must see Sidney Porter."

Difficulties of this kind have been met in some libraries by changing the wording used on reference cards. Instead of asking the reader to "see Porter, Sidney," a note is added to the O. Henry reference card which reads: "Works by O. Henry are to be found in this catalog under Porter, Sidney."

c. Arrangement. Reports show that the greatest difficulty

is due to the arrangement of cards. Many patrons are unable to use an alphabetical file. This is exceedingly complex in a card file because there is no way of showing the sequence of letters. Only one entry can be seen at a time and there is no continuity to guide one like that in a book catalog where a whole page is visible.

Compound and hyphenated words are difficult to locate, words spelled with an umlaut cannot be found, names beginning with Mc and Mac evade one, and country and state names, as Massachusetts Dept. of taxation; Massachusetts, Bureau of taxation, confuse the reader.

One report states, "New borrowers are generally very eager to know just what the catalog is and how to use it. Their difficulty seems to be in understanding the order of the cards. One reader told of her trouble in finding the works of Anatole France. She did not know that the surname France was placed before France, the country, and therefore missed these cards." A boy could not find a book by Eastlake, which he knew was in the library, and appealed to the assistant. He had been looking for Eastlake among names beginning with East as a separate word.

d. One question demands another. Many questions which come from readers must be interpreted by an assistant because they are incomplete. In other words, one question demands another before it can be answered. A reader will request a dictionary, but until the assistant has asked what kind of dictionary is wanted, he cannot serve the reader. Such questions show how readers fail to express all they have in mind when they approach the catalog.

A reader asked for a Canadian history but could not find it because he looked under History instead of *Canada.* A disappointed boy said there wasn't a thing in the catalog about the last war and when asked where he had looked for this in the catalog, said he had looked under War. He found what he wanted under *European war* only after he had been directed to the correct heading.

e. Suggestions for improving the catalog. Interviews with readers familiar with library tools resulted in the following

comments: "History divided by periods and arranged in strict chronological order is confusing. I never knew until recently that it was divided thus and yet I used the catalog for everything I wanted during my whole college course. I cannot recall just how I did locate what I wanted but I must have found the main headings such as 'U. S. History' and then ignored the subject headings under period. I believe that a strictly alphabetical arrangement would be easier to understand."

A letter received from an official of a publishing house who uses libraries a good deal reads in part as follows:

> "Speaking from the point of view of the layman and not the expert and without any too great a knowledge of the technical side, I feel that
>
> "1. A card catalog should be kept prominently placed in every library where it may be readily accessible to everyone seeking the services of the library.
>
> "2. Patrons should be encouraged to use it rather than to ask questions at the counter. The library should become more and more a sort of help-yourself place—a super Piggly Wiggly shop. It is a fine experience for young people especially to learn to investigate matters for themselves and library research should be part of their education.
>
> "3. The cards should be made out intelligently so that they may be readily understood by everybody, with sufficient cross references so that if the card does not yield all the information, the individual can pursue various clues and thus gain the facts needed.
>
> "4. The Card catalog should cover all books including the new accessions. It is an exasperating experience on the part of the patron of the library to discover that the library has a book but that it is not cataloged, and any library that does not keep up its accessions is at once under suspicion. If I feel that the library is likely to have a late book but I cannot find it on the card, the only way to satisfy myself in the matter is to inquire at the desk."

A serious worker made the following rather comforting statement: "I think impatience of quiet, orderly procedure—

of the mechanics of research—is really the consultor's chief enemy, and it is a fault which the librarian, who has to share the suffering, cannot be fairly called upon to cure. It is part of the plague of our unleisured and restless age."

IV. Instruction in the Use of the Catalog

1. Need for instruction. No more convincing evidence is needed than the above reports to show that there is need for definite instruction in the use of the card catalog. As has been said before, there has been a tendency on the part of readers and even of some library assistants, to place the blame for inability to answer questions on the catalog, but after one studies the questions and their ambiguity it is clear that no catalog yet compiled could answer some of the inquiries as formulated by readers.

Catalogers are sometimes asked, and justly so, why the catalog cannot be more simple, but how can it be very simple when books are so complex and the average reader is destitute of knowledge regarding authors, title, subjects, and the most simple rules for alphabeting?

The catalog must answer many needs. It is made for all kinds of readers, those who want the most profound information and those who merely want a definite book. It must provide for the man who wants to exhaust a subject and for the school boy who wants a piece to speak at school. It must make all entries appear in simple sequence even if these be as confusing as Buffalo, N. Y., Buffalos, and Buffalo Bill. Subjects must not be confused with authors, titles with series, or persons with cities, and yet the lucid alphabetical arrangement must be preserved. Facts must be correlated, combined, and segregated so that readers may trace a subject down to its finest point, and yet nothing must be introduced to confuse the searcher.

It is a difficult task to combine into one tool information leading to all kinds of books and used by people of various ages and all degrees of intelligence. The very complexity resulting from such an attempt is too great for the average person to understand. An interpreter must be at hand to give first aid.

The belief is prevalent among some librarians that the *service* which every library attempts to give should include the searching of all information by the library assistant, and thus save the time and inconvenience of the reader. There are many cases where this time element must be considered so that the reader will not be kept waiting, but there are also many opportunities to extend library service to include something more than a casual answer. If our purpose is to disseminate knowledge and further the use of books, we should take every opportunity to describe and interpret the catalog, which is the key to the books.

A few public libraries, most school libraries, and some university libraries offer courses on "The use of the library," including the use of the catalog. It is the results of such instruction which are proving why some library service is better than others. Readers who as children have been taught the meaning of the catalog and have become familiar with the cards are getting a great deal more out of the library than those who have not had such opportunities.

Training in the use of the catalog should not begin and end with one casual glance at the cards in the trays. It should be a carefully worked out program, including little or no technique of cataloging, but showing rather the basic principles upon which the catalog is built, and what it can do.

Readers should also be given some conception of how a book is made up, its parts, its author value, its subject value, its value as a translation, and its value as a new edition.

The second chapter of this textbook was read by a library user who returned it with the remark, "If I had known before what I know after reading this, I could have understood the card catalog long ago; everyone ought to have something of this kind put before him so he will comprehend what is on the cards and get more out of them." This comment was entirely unexpected, as a totally different motive led to the request that the chapter be read.

2. Methods of instruction. Two methods of instruction may be followed: the formal and the informal. Both will have a place because one will appeal to readers who are not only

ready for but are seeking some organized outline of study, while others will look askance at an attempt which carries with it the teaching element. Public libraries will probably want to begin, as some already have done, with the informal method.

Technical language should not be used in explaining the catalog and the directions should be brief and as clear as possible. No such instruction except that carried on with research workers or teachers should include the making of catalog cards. This belongs to a cataloger but not to the catalog user.

a. Suggestions for informal instruction:

(1) *Always have an assistant at the catalog to explain its use.* The desk of this assistant should be plainly marked with a notice calling attention to the fact that its occupant is ready at all times to answer questions about the catalog and to assist anyone in understanding its use.

This adviser need not be a cataloger, but he should have a knowledge of cataloging and be perfectly familiar with all the ins and outs of a card catalog. A person of diplomacy, whom readers feel free to consult and one who will overlook their limitations, should be chosen for this position. It must, of course, be understood that advice and not criticism is to be offered. This position might be combined with that of readers' adviser, but if this is done emphasis should be given to self-help. The reader should be shown how to look up his material in the catalog and not have books brought to him with markers designating the very pages he is to consult.

(2) *Printed descriptions of the catalog* sent out at intervals with all books circulated as well as for distribution at the catalog would reach a certain number of people.

(3) *A set of leaflets* devoted to certain points about the catalog and circulated freely is another way of advertising the catalog. These might cover such subjects as: (a) How to find Biography in the catalog; (b) How to find History; (c) How to trace a subject; (d) How to locate a new edition; (e) How to find a title when you do not know the author of a book; (f) How to find whether or not the library has a periodical, the

annals of a society, or the report of an institution; (g) How to know what patent reports are in the library; (h) How to find an English translation of a German work; (i) How to know what French and Spanish books are in the library; (j) How to know what books the library has in the Debaters' handbook series.

(4) *A series of lessons* may be posted on a bulletin board near the catalog with the caption: *What the card catalog can do for you.* Lessons could follow the same lines as outlined for the leaflets under (3), but because the directions are posted near the catalog, the definite question method could be used. The following are suggested:

1. What translations of Goethe's *Faust* are in this library?
2. Has this library any of Gilbert Murray's translations of the classics?
3. Are the names beginning with Mc and Mac arranged in this catalog as they are in the city telephone book?
4. Under what subject are the books on *ornithology* arranged in this catalog?
5. What was O. Henry's real name?
6. Has the library more than one edition of *Dombey and son?*
7. If you look under *Poetry* in the catalog, will you find listed there the title of every book of poetry in the library?
8. What is the date of the latest edition in the library of Baedeker's *London?*
9. What biographies of women are in the library?
10. In what book will you find a copy of Lincoln's *Gettysburg address?*

(5) *Articles about the catalog* printed in the local newspapers, in college papers, and in the bulletins issued by the library should be devoid of technical terms. A story form could be used.

(6) Establish the habit of using *catalog cards for posting lists of new books.* This will show how cards can be used out-

side of trays and readers will become used to seeing them. Place them in alphabetical order, one card under another, to give the appearance of a page.

(7) Prepare a *sample dictionary catalog* in one tray. Let this illustrate the different forms of entries and cards, but let it be complete from A to Z so that the reader can comprehend its arrangement. A catalog of this sort will be much more simple to explain and to understand than one tray which is only a part of the whole.

(8) If the library gives *talks over the radio* and a talk about the catalog can be made "snappy," include it in the program.

(9) Work out some simple *games for children* in the use of the catalog.

b. Suggestion for formal instruction. The following rather formidable outline is offered with the suggestion that it can be adapted to several types of readers. Those who are instructing high school students could simplify it by using the question and answer method, basing their questions on the ten lessons. Normal school librarians could make it more simple, but still cover many of the points suggested. The outline as it stands might form part of a course in general bibliography as such courses are now given in some colleges and universities.

Lesson I. Why cards are used instead of books when making a catalog.

(a) Advantages and disadvantages of each form
(b) Consult the catalog in book form of some large libraries
(c) Read the history of the British Museum catalogue. (Give references)

Lesson II. Methods of filing cards in a card catalog, and entries in a printed book catalog.

(a) { Alphabetical filing
     { Numerical filing

(b) { Alphabetical filing
     { Classed filing

(c) Cross-references
(d) *Examine* a classified catalog, a dictionary catalog, an alphabetical subject catalog, a cumulative book catalog

LESSON III. Variations in proper names.

(a) Names in the various languages, as Latin, Dutch, French, and Oriental
(b) Pseudonyms
(c) Married women
(d) Writers of the Middle Ages
(e) Indic names
(f) Names of titled persons
(g) Names of sovereigns

LESSON IV. Corporate bodies as authors.

(a) Compare American and European catalogs for entries for these
(b) Study A.L.A. rules for entry

LESSON V. Governments as authors.

(a) Official publications
(b) Study government catalogs, American and foreign
(c) Study arrangement of catalog of League of Nations publications as worked out by the Library of Congress

LESSON VI. Study of catalog entries (aside from author heading) on Library of Congress cards.

(a) Title including edition
(b) Imprint
(c) Collation
(d) Notes

LESSON VII. How subjects are represented in the catalog.

History
(a) Universal histories
(b) Ancient histories
(c) Country histories

(d) Wars and battles
(e) Naval and military histories
(f) Constitutional histories

LESSON VIII. How subjects are represented in the catalog.

Biography
(a) Collective
(b) Individual
(c) Relation to other subjects

LESSON IX. How the subject and forms of Literature (belles-lettres) are represented in the catalog.

(a) Draw a comparison between the classification and cataloging of books in this class
(b) Explain the difference between subject and form
(c) Show how the shelf-list supplements the dictionary catalog
(d) Value of author over subject in books in special forms of literature.

LESSON X. How parts of books are treated in the catalog, also entries for articles contained in periodicals and transactions of societies.

REFERENCES

Many books on *How to use the library* touch upon the use of the catalog but very few references cover teaching the use of the catalog.

AMERICAN LIBRARY ASSOCIATION. Education Committee. School library yearbook no. 1. A.L.A., 1927.

FARGO, L. F. Teaching the use of the library. In her The library in the school. A.L.A., 1930.

PRITCHARD, MARTHA. Mysteries of the catalog [lessons outlined for grades]. New York Libraries 10:208–10. May, 1927.

THOUGHT QUESTIONS

1. Mention some types of questions which the catalog cannot answer.
2. To what extent, in your mind, should readers be required to use the catalog?
3. Work out a game for children to bring out points in the use of the catalog.

4. In explaining a catalog what distinction would you make between the making of a catalog and its use?
5. Do you think of any way that a visible indexing scheme could be used in displaying a catalog?
6. Write a brief popular article explaining the card catalog.
7. J. I. Wyer in his *Reference work* makes the following statement (p. 280.): "While a catalog is assuredly a complex and delicate instrument, it should be most so to its makers." Explain this.
8. How far would you go into an explanation of the *call number* if you were demonstrating the use of the catalog?
9. What special type of library should give a course in the use of the catalog? Explain.
10. What chapters in this textbook will give suggestions to one who is outlining a course in the use of the catalog? Explain how they can be used.

Chapter XX

Cataloging and Classifying History Books

I. History as Form

II. History as Subject
1. General works
2. Form divisions under History
3. Philosophy of History. Civilization (901)
4. Universal and general histories
5. The caption *History* in the catalog
6. Correlation of subjects by references in the catalog
7. Histories limited to place and periods

III. Arrangement of Period Books in the Catalog

IV. Histories Devoted to Special Themes
1. Constitutional histories
2. Military and Naval histories
3. Wars

V. Minor Points to Observe

VI. Reference Books

VII. Required Reading

VIII. Problem

This chapter is introduced to show, in outline, a method used by one instructor in presenting the subject History to a class of students in Library science. The Decimal classification is the classification scheme under discussion.

It is assumed that students have read Chapters I to X of this text and have studied in detail at least one other class of the Decimal classification system, that they know how to use the *A.L.A. catalog rules,* and are familiar with the unit card. A lesson such as this would be given late in the first semester. It illustrates how the three subjects, Classification, Subject headings, and the Technique of cataloging, have been correlated in one course. It will be observed that the technique is made to appear as though incidental. Equal emphasis is

given to technique, but it comes in class discussion after this lesson, that is, after the laboratory practice.

We shall take the History group, exclusive of description and travel, and biography, and try to find some of the outstanding characteristics of the books which make up this class of literature. The student will have the Decimal classification (History class 900) before him during the class period.

I. History as Form

History may be said to touch all classes of literature. Almost every large subject has at some time been treated from a historical point of view. For example, there are general histories of music and also histories limited to music as developed by certain peoples, such as the book by M. M. Nathan entitled *History of Russian music.* The value of this book does not lie in its contribution to history but to music as developed in Russia. It is concerned with music limited to one people; it gives an account of the rise and progress of the Russian school of composers, but makes no other contribution to Russian history.

Because the historical treatment of subjects is common to all classes of literature, it is one of the forms which the cataloger quickly recognizes as he examines books in any class. Dewey has provided for these books under many subjects by including history as one of the form divisions.

II. History as Subject

When the historical method is applied to the recording of the doings of peoples, including a description of their progress, their ways, their institutions, and their political changes, such books form a major class of literature. The form is overshadowed by the importance of the subject History.

1. General works. Books written *about* history are usually limited to one of the form divisions of history, as Vincent's *Historical research,* which would class in 907 since research is a method of study. The term "History in general" must not be confused, however, with "General histories" which class either in 909 or under the country to which they belong.

2. Form divisions under History. The same form divisions are given to history books as are assigned in other classes with the exception of 909 which is reserved for universal and general modern histories. This will be discussed later when we consider the books classing in 909.

3. Philosophy of History. Civilization (901). The classifier frequently finds it difficult to decide whether books which might fall in 901 may not more appropriately class in 301, Theory of Sociology. It is frequently impossible to say to which study these books belong. This problem is becoming more complicated each day because of the marked increase in books on civilization.

The following definition of R. E. Park may make clear the fundamental aims of the two sciences:

> "Both history and sociology are connected with the life of a man as man. *History,* however, seeks to reproduce and interpret concrete events as they actually occurred in time and space. *Sociology,* on the other hand, seeks to arrive at nature and society, irrespective of time and of place."[1]

Following this definition, *History of contemporary civilization,* by Seignobos, would class in 901, while *Social evolution,* by A. G. Keller, would go with the Sociology group in 301. The Library of Congress gives in its classification scheme a whole division called History of Civilization and Culture (CB) to such literature.

The subject, Civilization, illustrates very convincingly how the catalog supplements the classification. In classifying, these books are grouped in either of two main classes, 300 or 900, according to the point of view treated, but for the dictionary catalog, where no attempt is made to keep classes together, the cataloger can accept a term broad enough to include any phase of the subject and so bring all material under one subject heading. *Civilization* becomes the subject heading for the general books and under it are listed those which may classify in subdivisions of 300, 500, or 900.

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[1] Quoted in Barnes, H. E. The new history of the social studies. Century, 1925, p. 333.

Works on the civilization of a single country are of course classified under that country, and they are entered in the catalog under the country with subdivision *Civilization;* e.g., *U. S.—Civilization.*

Probably the most important subject headings related to this subject of civilization are: *Migrations of nations, Social problems,* and *Manners and customs.* The cataloger must know the meaning of these captions so that books treating of these more definite topics will not be given the subject heading *Civilization.*

4. Universal and general histories. "Universal history (Weltgeschichte) embraces the events of all nations and times in their connection, in so far as these affect each other, appear one after the other, and all together form a living totality."[1]

Dewey has included this subject in the *broad* group History for, as the definition above states, these books are not limited by place or peoples, but "embrace the events of all nations." These are divided into two groups: the universal and modern general histories are shelved by period in 909, while the general ancient histories are classed in 930. The general histories limited by place are classed with that place; e.g., general history of Germany would class in 943.

5. The caption *History* in the catalog. We have observed that the general histories precede on the shelves the histories limited by place, but if we now examine the catalog we find some difficulties in locating and correlating these general histories. An attempt is made to keep together general histories, not limited by place. By using form divisions and inverted headings, we get the following arrangement (Sears headings):

(a) Subject—History (Books *about* history; rarely used)

(b) Subject and Form divisions
- History—Dictionaries
- History—Philosophy
- History—Sources

(c) Subject
- History, Ancient
- History, Modern
- History, Universal

[1] Ranke, Leopold von. Vorredo zur Weltgeschichte. Taken from quotation in Vincent, J. M. Historical research. Holt, 1911.

Probably half of the readers who go to the catalog in search of a history turn to the word *History.* They are unaware that only the most general histories are under this heading; they do not realize that a history of Germany is under *Germany,* and that a history of their own country is under that country rather than under the word *History.* The cataloger must explain how History is treated by adding the following information card to the catalog:

History
For the history of a certain place, see the name of that place, as *United States—History*

For the history of a definite subject, see the name of that subject, as *Science—History*

6. Correlation of subjects by references in the catalog. One must refer to periods in history which are treated under independent topics. For example, the following references will illustrate:

History, Medieval See Middle ages—History
Middle Ages See also Renaissance
Middle Ages—History See also Europe—History—476–1492

7. Histories limited to place and periods. The History class in the Decimal classification is based on geographical divisions, after the universal histories have been provided for. Continents are given first, then countries. There is a great uniformity in treatment under each of these regional groups. Countries are divided by periods and also by geographical division. As soon as a historian has limited his treatise to place, that place takes precedence over form or period both in its position on the shelves and in the catalog. For example, a history of Egypt, although an ancient history, would not be entered in the catalog under *History, Ancient,* but under *Egypt—History, Ancient.*

It must be understood that the titles in the catalog under the word *History,* or its subdivisions, are for books not limited by place. This fact is often difficult for readers and students to comprehend when using the dictionary catalog, but it is again the old rule: Enter under the specific heading. The cataloger must constantly ask himself: What is the author's

intention? Is it, for example, his intention to write a treatise on ancient history as a whole, or to limit his history to Egypt?

III. Arrangement of Period Books in the Catalog

Since the tendency is for the reader to think in terms of broad classes, it is wise for the small library to use few history period subdivisions under place. The reader who wants a history of the United States would find it simpler if they were listed all together in one file. He can then read the titles and pick out the book he wants. The cataloger must take particular pains to see that the titles are very clear and that they include the dates covered by the book. For example, a United States history covering the years 1865–1920 would be of little use to the man who was interested in the Civil war period alone. The date of publication of a work of history is far less important than dates which show the period covered by the text. For example, such a phrase as "to the present time" should be made to read "to the present time (1918)."

The student should examine the period subdivisions under *U. S.—History* in the Sears list, decide from the size of his collection how many and what subdivisions would be useful, and abide by these decisions until the collection grows to such proportions that further dividing becomes necessary. The subdivisions as given on the Library of Congress cards should frequently be canceled, as these are prepared for a very large collection where many period divisions are required.

To return to the chronological arrangement of entries in the catalog, we find them appearing in this fashion:

France—History
France—History—To 1328
France—History—House of Valois, 1328–1589
France—History—Bourbons, 1589–1789
France—History—Revolution, 1789–1799

A glance at this grouping will at once show that certain principles of the dictionary catalog are violated. Many specific headings are buried beneath the captions used to preserve a chronological arrangement. For example, many readers wanting material on the period of the Revolution will go immediately to *French revolution* not realizing that an exception

has been made in arranging entries for the history books. As has already been pointed out, references must be freely made from any specific topic included within these periods, e.g., *French revolution See France—History—Revolution, 1789–1799.* Some libraries are contemplating the alphabetical filing of history subdivisions under place.

IV. Histories Devoted to Special Themes

1. Constitutional histories. These histories are often the cause of much controversy, especially in school and university libraries, since they contribute to History and also to Political science. Many professors of history object to having them removed from the History class and shelved with the books in Political science and, contrariwise, the professor of political science is equally disturbed if they are segregated from his group and given to the history professor. Thus occurs one of the many entanglements of book classification which are difficult to explain, and in which compromise is dangerous. Both the Decimal classification and that of the Library of Congress provide a place for Constitutional histories in the Social science group, and the large library usually finds it wise to follow this plan, using the argument that the classification is so planned and that it is a serious matter to make exceptions. In libraries, particularly small public and high school libraries, where the collections are not large and the lines are not sharply drawn between History and Political science, one would be justified in canceling the Political science number (342) and throwing these books into the History group. Then all constitutional histories of the United States would take the number 973. These books appear in the catalog under place. The subdivision *Constitutional history,* or simply *History,* may be used.

2. Military and Naval histories. These terms are practically self-explanatory. Books which may be regarded as lying within this class deal with history from the standpoint of warfare, either military or naval. They must be distinguished from books on the history of military and naval science (355 and 359).

The military history of a given war is put with that war.

3. Wars.[1] Books descriptive of wars usually class with the country where the war was fought. The literature of such periods of history may be very prolific and may necessitate special treatment. The student should study the Civil war period of United States history as developed in the Dewey classification in order to gain some conception of the extent of the literature.

Caution must be observed when classifying books which appear during or just after a war. Many works published between 1914 and 1920, which have no real bearing on the European war, have been buried in the group of war literature. It is very easy for the classifier to place emphasis on the *topic* which occasioned the book rather than on the real *subject* treated by the book. Authors take advantage of such periods of history to write all kinds of prophecies, all manner of theories, and all forms of literature resulting from the stimulation of the times. The classifier must segregate this literature from that which treats directly of the war, the way it was fought, its history, results, and consequences. If the book contributes to a definite subject and the war has been used to give emphasis to the author's theme, the classifier must classify by subject and not according to the illustration used.

It is possible to touch on the European war only by calling attention to the place given to it in the Dewey classification (940.3). This scheme is probably adequate for the library of average size, but later schemes should be consulted if one is called upon to classify and catalog a large collection. Note has already been made in an earlier chapter of the *Index of the books relating to the European war* as printed by the British Museum; this and other lists will be found to be valuable aids.

V. Minor Points to Observe

The following are general points to be observed in cataloging history books. Some of these have already been mentioned, but will be repeated here for the sake of emphasis:

[1] See Merrill, W. S. Code for classifiers. A.L.A., 1928, p. 52–53.

1. See that dates covered by the text are included as a part of the title
2. See that maps are noted as a part of the collation
3. See that series cards are made for all important series. These are especially useful in history
4. Watch for analytical material, especially in long histories, e.g., World histories, and also in historical collections, such as Essays
5. Peruse the reports and transactions of historical societies for analytical material
6. Watch certain publications, even newspapers, for local history material
7. See what historical serials are being analyzed by the Library of Congress for which you can get printed cards
8. Note carefully in newspapers, current events magazines, and historical journals, the changes in political divisions and also changes in names of cities, and make reference cards

VI. Reference Books

The following reference books will be found useful when cataloging and classifying history books. Consult Mudge, I. G., *Guide to reference books,* for the guides to special countries.

1. Chevalier, Ulysse. Répertoire des sources historiques du moyen âge. 1894–1907. 2v. in 4.
2. Coulter, E. M. Guide to historical bibliographies. University of California Press, 1927.
3. The Europa yearbook; an annual survey of European politics, art, and literature, a European Who's who and directory. Routledge (Europa Publishing Co.), 1926.
4. Haydn, Joseph. Dictionary of dates and universal information relating to all ages and nations. Putnam, 1911.
5. Lippincott's new gazetteer; a complete pronouncing gazetteer or geographical dictionary of the world. Lippincott, [c1922]
6. Ploetz, K. J. Manual of universal history, tr. and enl. by W. H. Tillinghast. 2d ed. rev. Houghton, [c1925]
7. Smith, E. F. Dictionary of dates brought down to the present (1911) day. Dutton, 1911. (Everyman's library)
8. Smith, Sir William. Smaller classical dictionary, ed. by E. H. Blakeney. Dutton, 1910. (Everyman's library)
9. Vincent, J. M. Historical research; an outline of theory and practice. Holt, 1911.

VII. Required Reading

Merrill, W. S. Code for classifiers. A.L.A., 1928, p. 91–101.

Sayers, W. C. B. An introduction to library classification. Grafton (Wilson), 1922, p. 216–21.

VIII. Problem

Classify and catalog the following books according to directions stated under (b).

(a) List of books to classify and catalog.[1]

* 1. Story of mankind. 21–20552
* 2. History of the middle ages (Duruy) 3–7264
* 3. Breasted. Survey of the ancient world. 19–9790
** 4. Harrison, J. A. The story of Greece. 3–34401
** 5. Sparks, E. E. The United States of America. 2v. 4–32659
** 6. Kidd, Benjamin. Principles of Western civilization. 2–5233
* 7. Wells, H. G. Outline of history. 20–19599
** 8. Botsford, G. W. Hellenic civilization. 15–18679
** 9. Carter, E. H., ed. The new past and other essays. 25–3554
* 10. Report of the Anniversary of the Battle of Gettysburg Commission
* 11. Spaulding, O. L. Warfare, a study of military methods from the earliest times, 1925. 25–14309
* 12. Froude, J. A. English seamen in the 16th century, lectures delivered at Oxford. 2–21612

(b) Directions to students.

Books marked *

(1) L. C. cards (author only) will be supplied for these books
(2) Compare cards with the books and report on author entries
(3) Add at the bottom of the card the A.L.A. rule illustrated by the card
(4) Interpret all L. C. classification numbers on the L. C. cards

Books marked **

(5) Classify each book by Dewey
(6) Catalog
  (a) Author card only
  (b) Note A.L.A. rule number
  (c) *Trace* all added entries and subject headings
    (Do not make added entry or subject cards)
  (d) Trace all name references bearing on the author's name

[1] The numbers following the titles are order numbers for Library of Congress cards. They are not for students but for others who may want to follow this text.

(7) Make series cards for all books in the Story of the nations series
(8) Do not make *subject* references. These will follow after subject headings have been revised
(9) Reference books may be freely consulted but library catalogs including the Library of Congress depository catalog should not be used
(10) The results of this problem will be used for class discussions. Students' cards will be thrown on the screen
(11) TIME—Ten hours will be allowed for this problem

Appendix I

L. C. Card Numbers for Model Cards Illustrative of A.L.A. Rules[1]

The full set of these cards can be purchased from the Card division of the Library of Congress for $2.50. This is a special, half-rate price, which the Library of Congress allows to libraries, library assistants, and students in Library Science. Order for the *complete set* should read: "Set of model cards illustrating A.L.A. rules." It is not necessary to include L. C. card numbers in the order when ordering a complete set.

Single cards may be purchased at the regular rate of .025 for the first copy, .015 for additional copies, but the minimum order must be for 10c. Order *single* cards by L. C. order numbers given in the following list.

A. L. A. rule no.	L. C. card no.
1	25-26250
2*	27-13134
	24-16612
3	7-37287
	26-5811
4	21-17780
5	6-45372
6	27-4371
7	11-14575
8	3-14049
9	6-11378
10	2-30458
11	4-23546
12*	4-30329
13	4-35616
14	8-5634 (2)
15	17-11015-17(2)
	6-8202x[1]
16	24-12580
17	A23-907
18	6-5882
19	10-20169
	23-4790
20	4-14018
21	9-8006
22	3-11066
23	20-7384
24	no card
25	10-19182
26	23-18479
	12-13213
	27-9458
	19-1350
27	9-2478
28	26-24523
29	24-1053
30	20-4413
31	A23-2244
32	16-15269
33	12-31331
34	10-14745
35	22-9659
36	3-29044 (2)
37	12-12592
	27-4105
38	7-26108
	26-14516
39	3-12165
40	16-5972
	9-10280
41	A10-1930
	27-5099
	7-16037
	99-5325
42	16-6396
43	E10-2441
44	1-15202
45	18-22001
46	16-12789
	16-10661
47	24-5232
	(See added entry)
48	9-14943

[1] For use of model cards, see p. 147.
* Variation from A.L.A. rule.

A. L. A. rule no.	L. C. card no.
48	26-11758
48	21-8934
49	3-29576
50	13-26179
51	12-30315
	15-11584
52	16-15493
53	25-19849
54	5-16410
55	20-1701
56	13-33890
57	A11-1765
58	25-15795
	27-7193
59	E27-87
	9-6288
	25-2292
Agr	26-1161
60	27-26345
61	3-22130
62	11-14725
	22-25223
63	8-4943
64	5-42939
65	24-31431 (2)
66	11-33770
67	A16-1069
68	18-27294
69	3-24430
70	6-9812
71	11-35261
	5-14739
	12-25152
72	27-18430
73	4-35717
	12-6358
	6-15531
74	9-18088
	4-30640
	25-15373
75	7-16961
76	9-24288
77	16-18126
78	15-3162
	9-16065
79	12-2440
80	25-1462
81	8-14210
82	17-2980
	9-17981
83	5-26556
84	E9-1848
	24-7667
85	24-22338
	20-21606
86	26-14215
87	E11-636
	22-23644
88	E17-520
	11-9440
89	25-16465
	19-13386
90	5-19006
	8-22431
91	21-3324
92	13-2304
93	15-12293
	5-31952
94	6-25779
	7-18382
95	13-15209
Agr	11-781
	6-342
96	22-8536
97	13-8719-20
	4-20647
	26-18327
98	26-14455
99	13-10315
100	A23-441
101	22-17273
102	7-15707
103	9-10633
104	5-1571
105	13-17327
	21-27496
106	6-43497
107	12-4962
108	16-27164
109	21-5352
	25-26803 (2)
	22-4815
110	21-21871
111	14-19413
	11-9658 (3)
	4-11443 (2)
111	15-9353 (2)
112	13-25637
	22-23586
	26-26410
113	no card
114*	27-23356
115*	23-16308
	6-16955
116	8-3350
117	5-35479
118	7-34695
119	20-23087
	5-3720
120	A10-39
	20-6312
121	16-25806
	5-14337
	26-18838
	26-18223
122	8-37281
123	4-3781
124	13-6647
125	4-12953
	3-8786
126	17-4225 (2)
	9-8074
	6-26596
127	7-8878-9
	4-33126
128	See A.L.A. code
129	3-11517
130	10-18250
	15-16098
	25-15472
131	24-14654
132	7-8920
133	2-7043
134	2-17518
135	99-2281
136-169	not included
170	25-27082
	13-14398
	5-30425
	26-6294
	E12-466
171	25-10301
	26-14488
	5-15757

* Variation from A.L.A. rule.

Checking L. C. Model Cards When Received

The Library of Congress will send the set of model cards arranged by card number in one file. In the following list these card numbers are placed in the first column immediately in front of the A.L.A. rule number. When the cards are received the A.L.A. rule number should be added to each card as a filing medium.[1]

L. C. card no.	A. L. A. rule no.	L. C. card no.	A. L. A. rule no.	L. C. card no.	A. L. A. rule no.
99-2281	135	5-35479	117	9-16065	78
99-5325	41	5-42939	64	9-17981	82
1-15202	44	6-342	95	9-18088	74
2-7043	133	6-5882	18	9-24288	76
2-17518	134	6-8202x[1]	15	A10-39	120
2-30458	10	6-9812	70	A10-1930	41
3-8786	125	6-11378	9	E10-2441	43
3-11066	22	6-15531	73	10-14745	34
3-11517	129	6-16955	115	10-18250	130
3-12165	39	6-25779	94	10-19182	25
3-14049	8	6-26596	126	10-20169	19
3-22130	61	6-43497	106	E11-636	87
3-24430	69	6-45372	5	Agr 11-781	95
3-29044	36	7-8878-9	127	A11-1765	57
3-29576	49	7-8920	132	11-9440	88
4-3781	123	7-15707	102	11-9658 (3)	111
4-11443 (2)	111	7-16037	41	11-14575	7
4-12953	125	7-16961	75	11-14725	62
4-14018	20	7-18382	94	11-33770	66
4-20647	97	7-26108	38	11-35261	71
4-23546	11	7-34695	118	E12-466	170
4-30329	12	7-37287	3	12-2440	79
4-30640	74	8-3350	116	12-4962	107
4-33126	127	8-4943	63	12-6358	73
4-35616	13	8-5634	14	12-12592	37
4-35717	73	8-14210	81	12-13213	26
5-1571	104	8-22431	90	12-25152	71
5-3720	119	8-37281	122	12-30315	51
5-14337	121	E9-1848	84	12-31331	33
5-14739	71	9-2478	27	13-2304	92
5-15757 Revised	171	9-6288	59	13-6647	124
5-16410	54	9-8006	21	13-8719-20	97
5-19006 Revised	90	9-8074	126	13-10315	99
5-26556	83	9-10280	40	13-14398	170
5-30425	170	9-10633	103	13-15209	95
5-31952	93	9-14943	48	13-17327	105

[1] For use of model cards, see p. 147.

L. C. card no.	A. L. A. rule no.
13-25637	112
13-26179	50
13-33890	56
14-19413	111
15-3162	78
15-9353 (2)	111
15-11584	51
15-12293	93
15-16098	130
A16-1069	67
16-5972	40
16-6396	42
16-10661	46
16-12789	46
16-15269	32
16-15493	52
16-18126	77
16-25806	121
16-27164	108
E17-520	88
17-2980	82
17-4225 (2)	126
17-11015-17 (2)	15
18-22001	45
18-27294	68
19-1350	26
19-13386	89
20-1701	55
20-4413	30
20-6312	120
20-21606	85
20-7384	23
20-23087	119
21-3324	91
21-5352	109
21-8934	48
21-17780	4
21-21871	110
21-27496	105
22-4815	109
22-8536	96
22-9659	35
22-17273	101
22-23586	112
22-23644	87
22-25223	62
A23-441	100
A23-907	17
A23-2244	31
23-4790	19
23-16308	115
23-18479	26
24-1053	29
24-5232	47
24-7667	84
24-12580	16
24-14654	131
24-16612	2
24-22338	85
24-31431 (2)	65
25-1462	80
25-2292	59
25-10301	171
25-15373	74
25-15472	130
25-15795	58
25-16465	89
25-19849	53
25-26250	1
25-26803 (2)	109
25-27082	170
Agr 26-1161	59
26-5811	3
26-6294	170
26-11758	48
26-14215	86
26-14455	98
26-14488	171
26-14516	38
26-18223	121
26-18327	97
26-18838	121
26-24523	28
26-26410	112
E27-87	59
27-4105	37
27-4371	6
27-5099	41
27-7193	58
27-9458	26
27-13134	2
27-18430	72
27-23356	114
27-26345	60

Appendix II

Character Traits of a Cataloger

(Prepared by the Library Curriculum Study with the assistance of Emily H. Kenagy, from interviews with 23 librarians and catalogers.[1])

1. Accuracy
2. Adaptability
3. Belief in work
4. Dependability
5. Forcefulness
6. Health
7. Imagination
8. Industriousness
9. Initiative
10. Intelligence
11. Judgment
12. Memory
13. Mental curiosity
14. Neatness
15. Patience
16. Pleasantness
17. Professional knowledge
18. Speed
19. System

Character Traits of a Cataloger

Defined in terms of trait actions

1. Accuracy
   a. Transcribe information accurately
   b. Reproduce card forms correctly
   c. File cards correctly
   d. Revise work carefully
2. Adaptability
   a. Adjust yourself to new needs and views
   b. Meet emergencies effectively
   c. Change from one job to another easily
   d. Cooperate well; take suggestions from superiors
   e. Be willing to make changes for the better

[1] For a detailed account of the methods employed, the student is referred to Flexner, J. M. Circulation work in public libraries. A.L.A., 1927.

3. Belief in work
    a. Realize the importance and value of cataloging to the successful functioning of the whole library
    b. Believe in the service rendered through the analysis of books
    c. Improve yourself by general reading and observation
    d. Strive to make a catalog that will be of real use to the public

4. Dependability
    a. Do a good quality of work at all times
    b. Keep books cataloged to date
    c. Do what is expected of you
    d. Work independently without having to be followed up

5. Forcefulness
    a. Take a job and put it through
    b. Push yourself to get out the mass of work that needs to be done
    c. Dig out information that is hard to find
    d. Be able to maintain confidence in self and in work

6. Health
    a. Do not tire easily
    b. Do not get nervous or excited under extra work
    c. Be able to refresh yourself through a brief period of relaxation
    d. Hear distinctly
    e. Have strong eyes

7. Imagination
    a. See cataloging problems from the point of view of the circulation assistant
    b. Visualize the borrower and his needs
    c. Get the point of view of the author of the book cataloged

8. Industriousness
   a. Work steadily, not by fits
   b. Do not waste time; do not talk on the job
   c. Do not be disturbed by necessary interruptions
9. Initiative
   a. Take lead in calling attention of superior to problems or to desirable changes
   b. Try to solve problems you meet without asking unnecessary questions
   c. Do things you know must be done though not your own specified tasks
   d. Introduce reasonable experiments to settle questions of method
10. Intelligence
   a. Be able to seize upon facts and make them useful
   b. Do not follow blindly a list of headings which are out of date
   c. Grasp quickly the content of a book
   d. Be able to carry out instructions
11. Judgment
   a. Note relative importance of pieces of work and select most important
   b. Discriminate between the essential and non-essential; do not devote unnecessary time to little things
   c. Do not stick to red tape at expense of things of greater importance: break a rule if advisable
12. Memory
   a. Remember different types of card forms
   b. Recall rules without looking them up
   c. Recall related subjects in assigning of headings
   d. Remember books that pass through your hands
   e. Remember classification symbols
13. Mental curiosity
   a. Have an inquiring mind: find out what a subject is about rather than take it for granted

b. Find out wherein any book is different from any other in its field
c. Exercise a critical faculty: go to the bottom for information on a subject
d. Show research ability

14. Neatness
    a. Have cards typed uniformly
    b. Write a neat hand
    c. Do not let untidy looking cards go through
    d. Have a card copied if it cannot be erased neatly

15. Patience
    a. Work under a strain without getting annoyed
    b. Do exacting work without getting bored
    c. Do not hurry and worry when working under pressure

16. Pleasantness
    a. Work cheerfully at a tedious task
    b. Cultivate a sense of humor so as to appreciate the diverting incidents
    c. Help out in other departments cheerfully
    d. Accommodate others gladly

17. Professional knowledge
    a. Develop a broad acquaintance with the field of knowledge in general (must know in what field a subject belongs)
    b. Acquaint yourself with authors and books
    c. Know the technique of cataloging thoroughly: how to classify and assign headings
    d. Improve your general background by current reading
    e. Know foreign languages

18. Speed
    a. Turn out work in reasonable time
    b. File cards quickly without sacrificing accuracy
    c. Waste no motion in typing and writing

d. Move quickly from one task to another
e. Analyze and judge books rapidly

19. System
    a. Have a regular systematic way to carry on your work
    b. Help to keep room, equipment, tools, and shelves in order
    c. Keep own desk in order
    d. Put into use your knowledge of classification

Importance Ranking of Traits of Catalogers by Librarians and Patrons

Traits which received the same ranking by more than one person are given the same ranking number, and when this occurs the next sequence number is skipped. Thus under the librarians' column, intelligence and professional knowledge received the same ranking and therefore both of these have ranking number 2, and 3 is skipped, the next trait, judgment, receiving number 4. The patrons' column works exactly the same way, although it is naturally mixed because the traits are arranged in the order of ranking given by librarians.

	Librarians	Patrons
Accuracy	1	1
Intelligence	2	2
Professional knowledge	2	2
Judgment	4	4
Dependability	5	6
Imagination	6	10
Mental curiosity	7	4
Neatness	7	12
Belief in work	9	7
Industriousness	9	11
Memory	11	7
System	11	7
Speed	13	14
Adaptability	14	17
Health	15	16
Forcefulness	16	18
Patience	17	13
Initiative	18	15
Pleasantness	18	19

Appendix III

How to Compute the Cost of Classifying and Cataloging 20,000 Volumes

It is assumed that this collection is being prepared for a new public library not yet opened. The assistants have no duties except those outlined here. It will be noted from the title of this table that the only purpose is to show *how* costs may be computed.

I. *Cards and Guides*

In 20,000 volumes we will assume that there are 14,300 titles; 25% of the titles are fiction; 75% are non-fiction. Library of Congress cards are not available for 5% of the titles; therefore, plain cards must be provided for cataloging these.

7% of all titles will require reference cards.

3 cards allowed for each title of fiction including 1 card for the shelf-list.

4 cards allowed for each title of non-fiction including 1 card for the shelf-list.

I. (*cont.*) *Number and Cost of Cards and Guides*

Kinds of Cards	Total Number	Cost	Total Cost
(a) *Plain cards* Typed catalog cards (no L. C. cards available) 5% of 14,300—715 titles requiring typed cards 25% fiction 179 x 3 537 75% non-fiction 536 x 4 2144	2681		
Reference cards 7% of 14,300	1001	4000 @ $4.00 per M (includes 318 cards for waste)	$16.00
(b) *L. C. cards* 13,585 available 25% fiction 3,396 x 3 10,188 75% non-fiction 10,189 x 4 40,756	50,944	13,585 first cards @ 2.5c. . $339.625 3,396 x 2= 6,792 fiction second cards 10,189 x 3=30,567 nonfiction second cards 37,359	
	54,626 Total cards in catalog	Total second cards @1.5c. . 560.385	900.01
(c) *Guide cards* 546 guide cards (counting 1 guide for each 100 catalog cards)		$7.75 per M	7.75
			$923.76

II. *Capacity and Cost of Catalog Cases*

List Price of Cases[1]	Capacity	Number Required		Total Cost	
		Catalog	Shelf-list	Catalog	Shelf-list
		40,729 cards to be filed (incl. 1001 ref. cards and 403 guides)	14,443 cards to be filed (incl. 143 guides)		
1 15-tray unit $57.25 L. B. #93515.1R	18,750 cards	3 (capacity 56,250)	1	$171.75	$57.25
1 top $7.50 L. B. #90715		1	1	7.50	7.50
1 base (26 in.) $16.00 L. B. #90895		1	1	16.00	16.00
1 sliding reference shelf $11.00 L. B. #9855		1		11.00	
Note. Unit cases of 15 trays each are placed one on top of another so that but one top, one base and one sliding shelf are needed.				$206.25	$80.75
				Total $287.00	

[1] Prices and numbers refer to Library Bureau. Library supplies [catalog], 1928.

III. *Salaries and Time*[1]

Worked out by time and duties

Computation based on 42 hours per week; 4 weeks per month

Staff	Hour	Day	Week (6 da.)	Month (26 da.)	Time Required		Salary per mo.	Total Cost
1. *Cataloger*							$150	
(a) Titles classified and cataloged per		35	210	840	(for 14,300 titles)	17 mo.		$2,550.00
(b) Cards filed per	250				(for 54,626 cards) 218.4 hrs. or	1.3 mo.		195.00
(c) L. C. cards (titles) ordered per (100 titles in 3 hrs. 50 min.)	25		1050	4200	(for 13,585)	3.2 mo.		480.00
(d) Cards revised 1.25 min. per typed card .14 min. per printed card (426 printed cards per hr.)						1 mo.		150.00
(e) L. C. cards checked 1 day per month ($5.77)						.8 mo.		120.00
					Total for cataloger	23.3 mo.		$3,495.00
2. *Typist*							$100	
(a) Unit cards typed per			1617	6468	(for 2681 cards)	1.7 weeks		
(b) Headings (L. C. cds) per		700	4200		(for 50,944 cards)	12.1 weeks		
(c) Typing reference cards		500			(for 1001 cards)	.3 weeks		
					Total for typist	14.1 weeks		
					or	3.5 mo.		350.00
								$3,845.00

[1] The figures given here cannot be accepted as applying to all types of cataloging. The library already functioning will at once realize that both the time and cost figures, as worked out here, are lower than these items can possibly be in a library where old and new records must be constantly correlated.

IV. *Summary of Cost*

Stock for cards and guides	$ 923.76
Catalog cases	287.00
Salaries	3,845.00
	$5,055.76
Cost per title	$0.35
Cost per volume	0.253

Appendix IV

Comparison of the Output of a Catalog Department of a Public Library and University Library of 100,000 Volumes

In order to demonstrate the difference between cataloging for a public and a university library the following figures are set down and explained.

		Public Library		University Library
THE COLLECTION		100,000		100,000
Volumes				
Distribution of volumes	Central	67,000		
	A Branch	12,000		
	B Branch	8,000		
	C Branch	8,000		
	Extension work	5,000		
Added copies	60%	60,000	7%	7,000
	Central	27,000		
	Branches	33,000		
New titles	40%	40,000	93%	93,000
ANNUAL ADDITIONS				
Volumes		12,000		12,000
Added copies		7,200		840
New titles		4,800		11,160
OUTPUT OF VOLUMES per				
Year		12,000		12,000
Month (26 da.)		1,000		1,000
Day		38.46		38.46
OUTPUT OF TITLES per				
Year		4,800		11,160
Month (26 da.)		400		922
Day		15.39		35.46
STAFF REQUIRED				
Cataloger		2		4
Clerical assistant		2		3
Typist		1		2

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